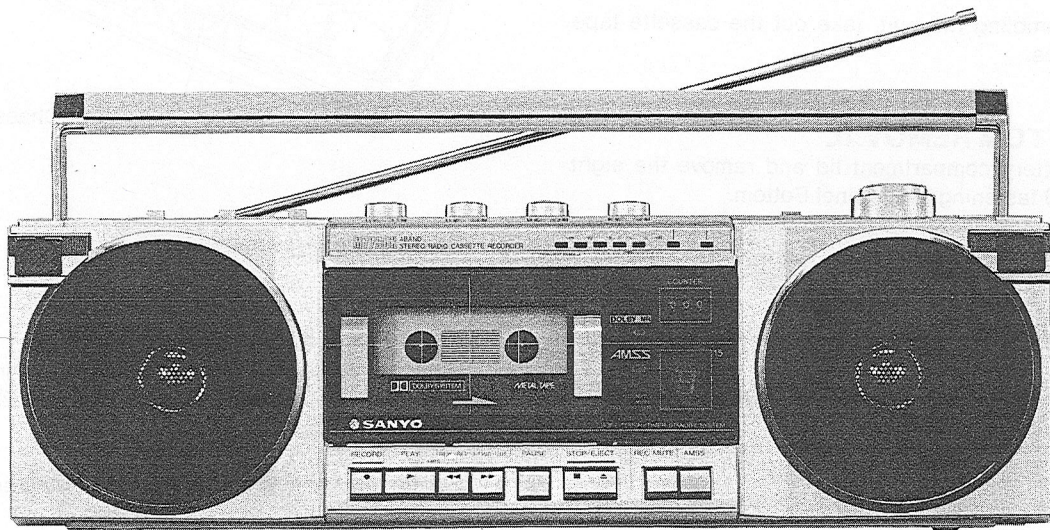


SERVICE MANUAL



STEREO RADIO CASSETTE RECORDER

M7790K



142 380 02

SPECIFICATIONS

Power Source		Frequency Response (Overall)	
AC	120V/210V/240V (50/60Hz)	Fe ₂ O ₃	50Hz ~ 13,000Hz
DC	10.5V	CrO ₂	50Hz ~ 14,000Hz
	(UM-2, HP 11, C Cell, Babyzelle, R 14) x 7	Metal	50Hz ~ 15,000Hz
Output Power	4W x 2 (Max.)	Crosstalk (with Fe₂O₃)	
Power Consumption	13W	Track to Track	60dB
Current Consumption (at Vol. Min.)		Harmonic Distortion (K3, with Fe ₂ O ₃) ..	3%
Record mode (with Metal)	260mA	Hum & Noise (at Vol. Min.)	-65dBs
Playback mode	210mA	Input Sensitivity and Impedance	
Fast Forward mode	210mA	MIC.	0.3mV/3.9kΩ
Rewind mode	210mA	LINE IN	300mV/100kΩ
Recording System	AC Bias	Output Level and Impedance	
Erasing System	AC Erasing	LINE OUT	550mV/2.2kΩ
Tape Speed	1-7/8ips. ±3%	Ext. Speaker	3,200mV/3.2Ω
Wow & Flutter	0.15%, WRMS	Headphone	3,900mV/32Ω
Fast Forward Time	130sec. (with C-60)	Oscillation Frequency	60kHz
Rewind Time	130sec. (with C-60)	Frequency Range	
Torque		MW	525 ~ 1,605kHz
Playback	30 ~ 65g-cm	SW1	2.3 ~ 7.3MHz
Fast Forward	55 ~ 180g-cm	SW2	7.3 ~ 23MHz
Rewind	55 ~ 180g-cm	FM	88 ~ 108MHz
Erase Ratio (Overall, with Fe₂O₃)	60dB	Dimensions	
Signal to Noise Ratio (with Fe₂O₃)	45dB	437(W) x 137(H) x 99(D)mm	
Channel Separation (with Fe₂O₃)	45dB	Weight	
		2.5kg	

—Specifications subject to change without notice.—

WM-9533

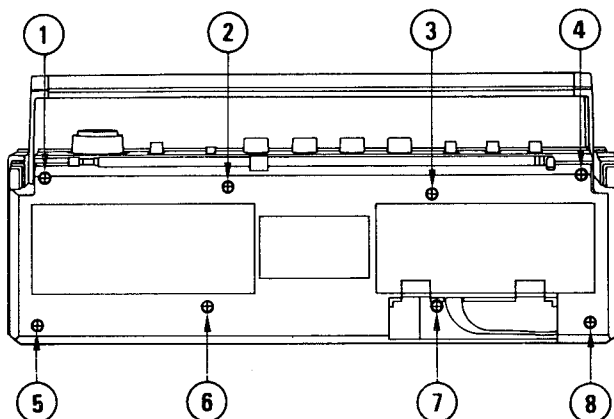
DISASSEMBLY INSTRUCTIONS

GENERAL REMARKS

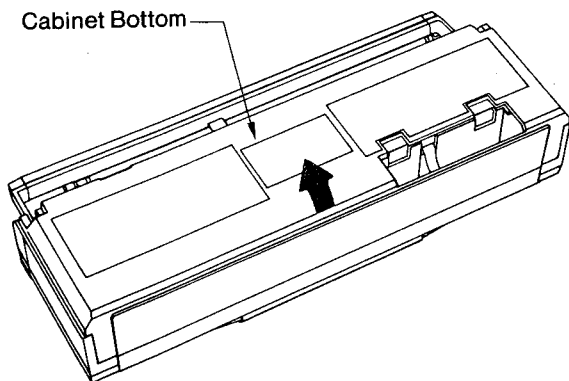
- Before disassembling the unit, spread a soft rubber mat or a cloth on the workbench to avoid scratches and grease stains.
- Do not spread anything which is likely to cause static electricity because transistors and ICs may be easily damaged by it.
- Reassemble the unit, noting the kinds of screws and the soldering and arrangement of the leads. Refer to "Circuit Diagram and Exploded Views" for correct assembly.
- Before disassembling the unit, take out the cassette tape and the batteries.

CABINET BOTTOM REMOVAL

1. Detach the battery compartment lid and remove the eight screws (1 ~ 8) fastening the Cabinet Bottom.



Cabinet Bottom

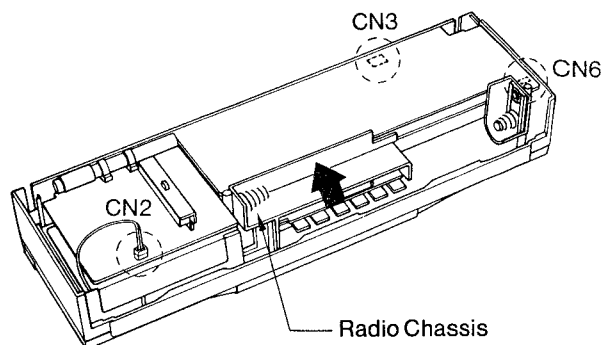


2. Detach the Cabinet Bottom by lifting it in the direction of the arrow and pull out the connector of the antenna from the Radio Tuner P.C.Board.
3. Reassemble in reverse order.

RADIO CHASSIS REMOVAL

1. After detaching the Cabinet Bottom, pull out the Tuning, Volume Control, Balance Control, Treble Control, and Bass Control Knobs from the unit.

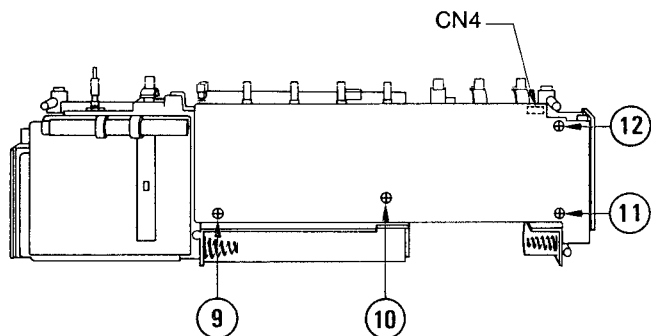
2. Remove the three connectors (CN2, CN3 and CN6) from the Amplifier P.C.Board and detach the Radio Chassis by lifting it in the directions of the arrow.



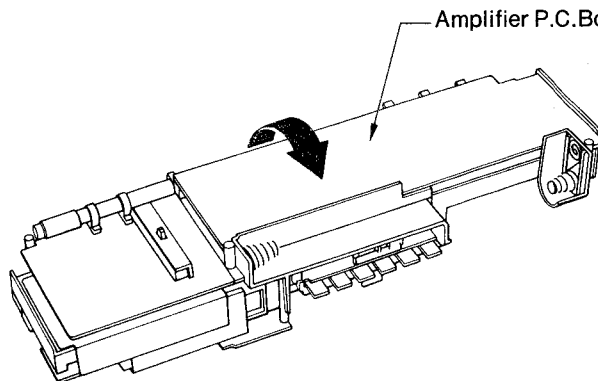
3. Reassemble in reverse order.

AMPLIFIER P.C.BOARD REMOVAL

1. Detach the Radio Chassis by following the instructions for it and remove the four screws (9 ~ 12) fastening the Amplifier P.C.Board.
2. Pull out the connector CN4 from the Amplifier P.C.Board.



Amplifier P.C.Board

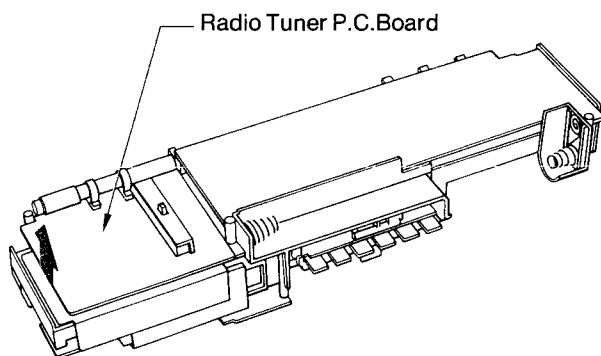
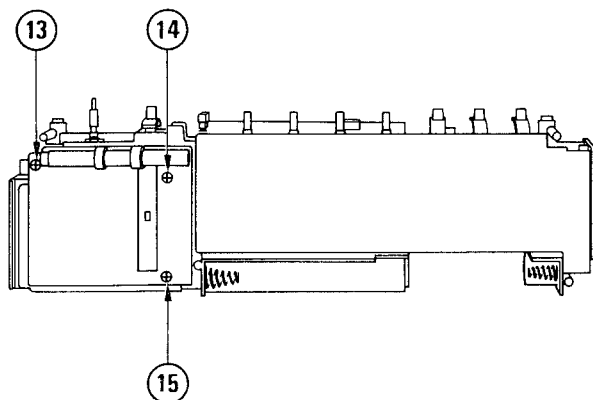


3. Detach the Amplifier P.C.Board by lifting it in the direction of the arrow noting the lead wires.
4. Reassemble in reverse order.

DISASSEMBLY INSTRUCTIONS (Continued)

RADIO TUNER P.C.BOARD REMOVAL

1. Detach the Radio Chassis by following the instructions for it and fully turn the Tuning Shaft in an arbitrary direction.
2. Remove the three screws (13 ~ 15) fastening the Radio Tuner P.C.Board.
Then, detach the P.C.Board by lifting it in the direction of the arrow noting the lead wires.



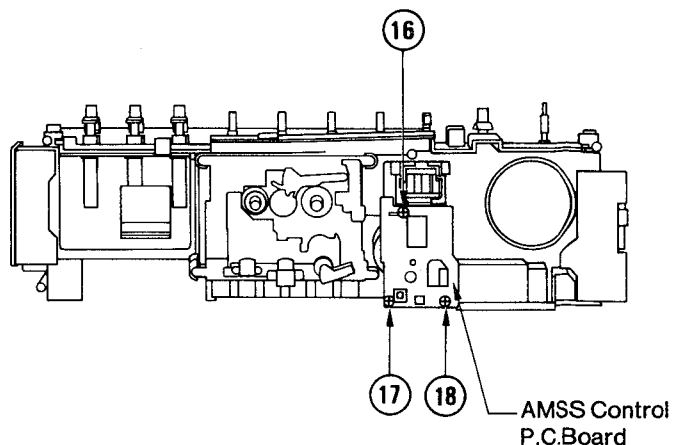
3. Reassemble in reverse order.

NOTE:

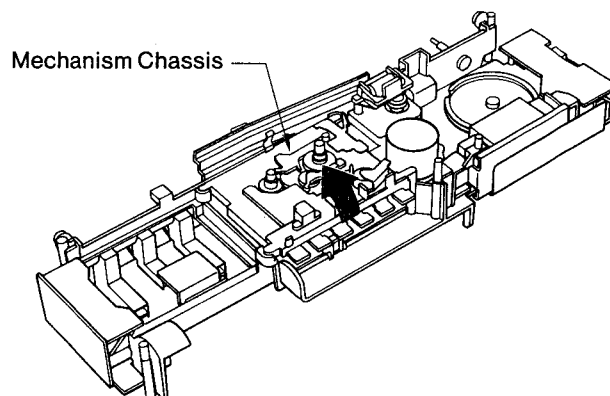
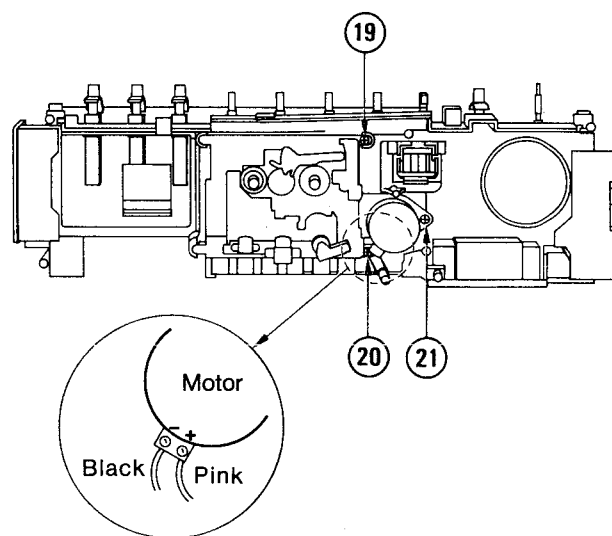
- * Do not turn the Tuning Shaft before the Radio Tuner P.C.Board is re-mounted to the unit.
- * When the Radio Tuner P.C.Board is mounted, insert the shaft of the variable capacitor into the hole on the drum. After that, check to see that correct dial indications are obtained.

MECHANISM CHASSIS REMOVAL

1. Detach the Radio Chassis by following the instructions for it and remove the screw (12) fastening the Amplifier P.C.Board.
2. Remove the three screws (16 ~ 18) fastening AMSS Control P.C.Board and detach the P.C.Board.



3. Remove the three screws (19 ~ 21) fastening the Mechanism Chassis and unsolder the two leads (pink and black) from the Motor.



4. Detach the Mechanism Chassis by lifting it in the direction of the arrow noting the lead wires.
5. Reassemble in reverse order.

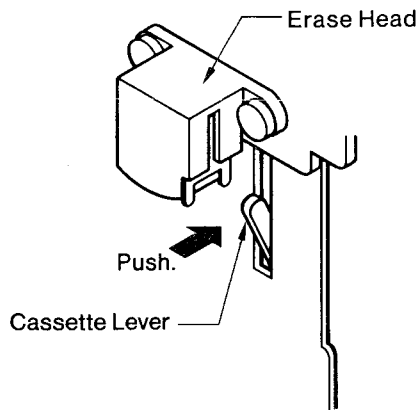
MECHANICAL ADJUSTMENTS

EQUIPMENT REQUIRED

- Cassette-type Torquemeter (100g-cm/160g-cm)
- Round-nose Pliers
- Plus Screwdriver
- A Pair of Tweezers
- Paint or Glue

GENERAL REMARKS

1. When a repair or an adjustment work on the mechanism is performed, remove the Mechanism Chassis from the unit and supply 12V DC from the constant-voltage regulator to the Ext. Power Jack on the Amplifier P.C.Board.
2. Before and after the mechanism adjustment, clean the tape contacting surfaces with a soft cloth soaked in alcohol. Trouble may occur because of oil and grease stains. The belts must be kept clean while the adjustments are performed.
3. If the Pinch Roller or Belt has quality deterioration such as scratches, replace it with a new one.
4. When the cassette tape is inserted into the cassette holder, the Play button can not be pressed. If the Mechanism is required to function under this condition, push the Cassette Lever as illustrated, so that the Button is released and the mechanism functions normally.



5. This Mechanism does not function when power is not supplied and any one of the buttons is pressed. When the batteries are almost used up and the Play button is pressed, the Slide Base stops halfway, making it difficult to remove the cassette tape from the compartment. To avoid this, replace the batteries with new ones beforehand.

Position Adjustment of Leaf Switches

This model has the following three leaf switches. Checking and adjustment for each switch must be conducted in accordance with each adjustment item.

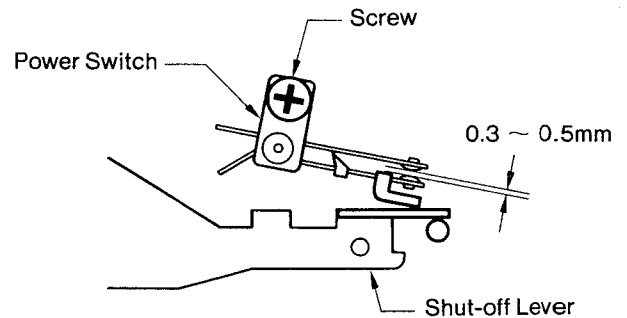
The unit should be set in the stop mode at each adjustment.

- * Power Switch
- * Play Mute Switch
- * AMSS Switch

1. Power Switch

When one of the select buttons (except for the Pause and Stop/Eject buttons) is pressed, this Switch is turned on by the Shut-off Lever, so that the Motor starts rotating. The driving motor rotates the flywheel and the rotational force transferred by the actuate gear makes the mechanism function.

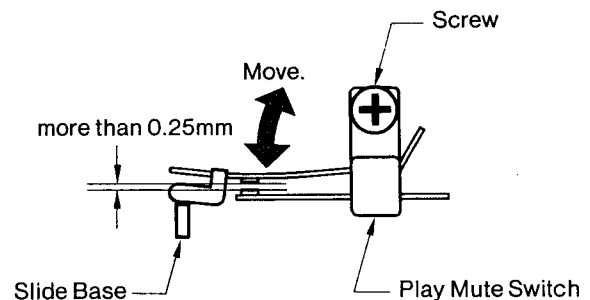
- * Check that the clearance of the switch contacts is 0.3 ~ 0.5mm with the Power Switch in contact with Shut-off Lever as illustrated.



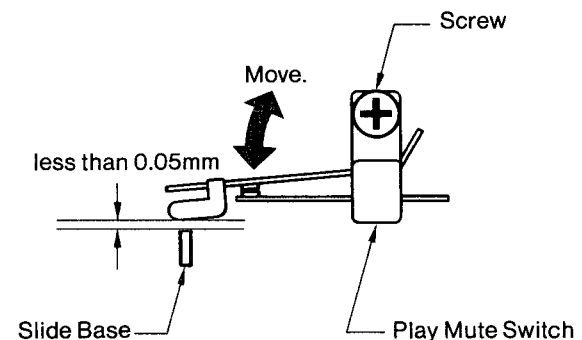
2. Play Mute Switch

This switch is normally closed and it is turned off by the Slide Base when the Play button is pressed.

- * Set the unit in the playback mode and check that the clearance between the switch contacts is more the 0.25mm as illustrated.



- * Press the Pause button and check that the clearance between the switch and the Slide Base is as illustrated. The clearance should be less than 0.05mm.

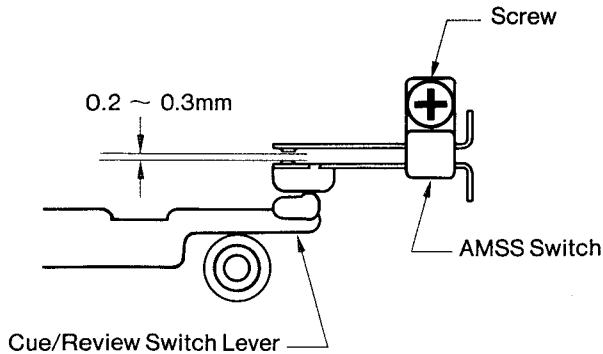


MECHANICAL ADJUSTMENTS (Continued)

3. AMSS Switch

This Switch is turned on by the Cue/Review Switch Lever when the unit is set in the cue or review mode by pressing the F.FWD or Rewind button in the playback mode. Then, the AMSS circuit is functioning.

- * Set the unit in the stop mode and check that the clearance between the switch contacts is 0.2 ~ 0.3mm with the AMSS Switch in contact with the Cue/Review Switch Lever as illustrated.



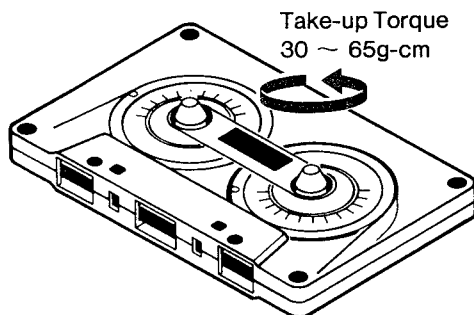
Switch Adjustment

Loosen the screws fastening each switch and move the switches to the specified positions if position adjustments are required.

After the adjustment, tighten the screws and secure the switches with paint or glue.

TAKE-UP TORQUE

1. Insert a cassette-type torquemeter (100g-cm) into the cassette compartment and set the unit in the playback mode. Then, check that the take-up torque is 30 ~ 65g-cm.

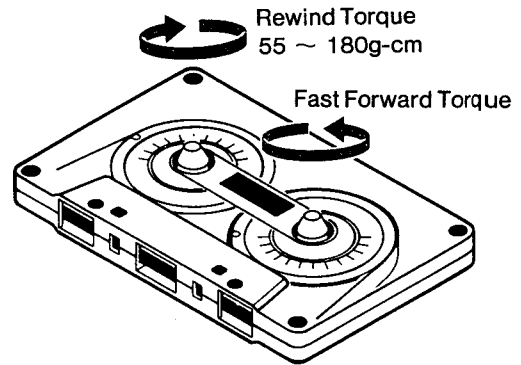


Cassette-type Torquemeter

2. If not, replace the Friction Assembly with a new one.

F.FWD AND REWIND TORQUES

1. Insert a cassette-type torquemeter (160g-cm) into the cassette compartment and measure the fast forward and rewind torque. Check that each torque is 55 ~ 180g-cm.



2. If not, replace the Friction Assembly with a new one.

AMSS SOLENOID ADJUSTMENT

AMSS (Automatic Music Select System) detects a silent space (unrecorded portion) between each music on a musictape and automatically plays back a desired music from the start.

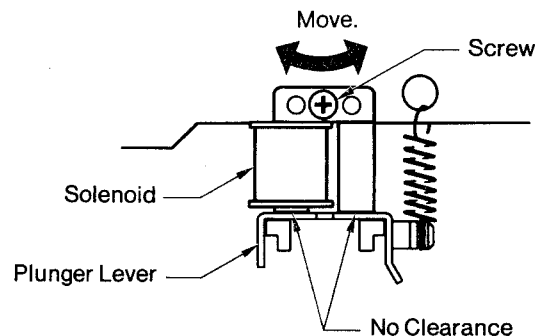
The unrecorded portion should last for more than approximately 4 seconds.

It may not operate correctly in the following cases:

- * When the recorded sound is often interrupted as in a speech tape.
- * When the silent space does not last long enough (less than 4 seconds).
- * When there is an appreciable noise in the silent space between two adjacent programs.
- * When the unit is placed on a television set, AMSS may not operate correctly due to adverse effect of the TV signal. In this case, put the unit away from the television set.

If AMSS Solenoid is not correctly positioned, AMSS Switch does not function correctly, F.FWD or Rewind button is released while AMSS is working, or a button may not be locked. In this case, perform the adjustment as follows:

1. Remove the Mechanism Chassis from the unit by following its removal instructions.
2. Loosen the screw fastening the Solenoid and adjust the Solenoid by moving it in the direction of the arrow, so that the Plunger Lever is tightly attached to the two absorption surfaces of the Solenoid as illustrated.



MECHANICAL ADJUSTMENTS (Continued)

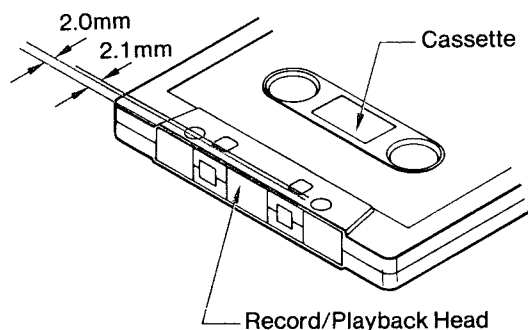
3. After the adjustment, tighten the screw.
Set the unit in the playback mode and check that AMSS mechanism functions correctly as follows:
 - * Check if F.FWD button can be locked by pressing it.
 - * Check if Rewind button can be locked by pressing it.
4. Readjust the solenoid position if either F.FWD or Rewind button can not be locked or is soon released.
5. After the confirmation, secure the screw with paint or glue.

RECORD/PLAYBACK HEAD ADJUSTMENT

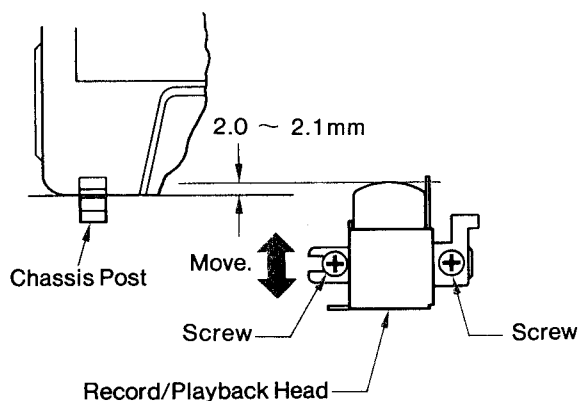
After a head has been replaced or disassembled, adjust its position following the procedures.

NOTE:

A Cassette with the specified pin-head distances marked on it can be used as a very convenient gauge for the Head Position Adjustment. (Do not use a worn cassette.)



1. Set the unit in playback mode and press the Pause button.
Check that the distance from the Chassis Posts to the Record/Playback Head is 2.0 ~ 2.1 mm as illustrated.

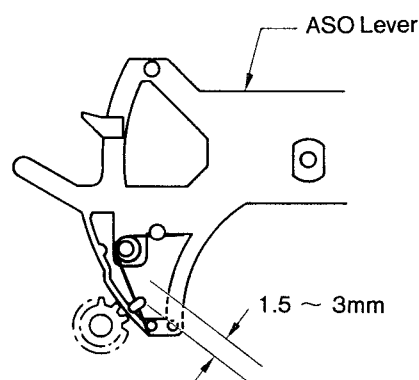


2. If necessary, loosen the screws fastening the record/playback head and adjust the head to the specified position by moving it.
3. After the adjustment, tighten the screws and secure them with paint or glue.
Then, check that AMSS mechanism functions correctly.

ASO LEVER

The service part of the ASO lever is ;noit cut to avoid deforming, as illustrated.

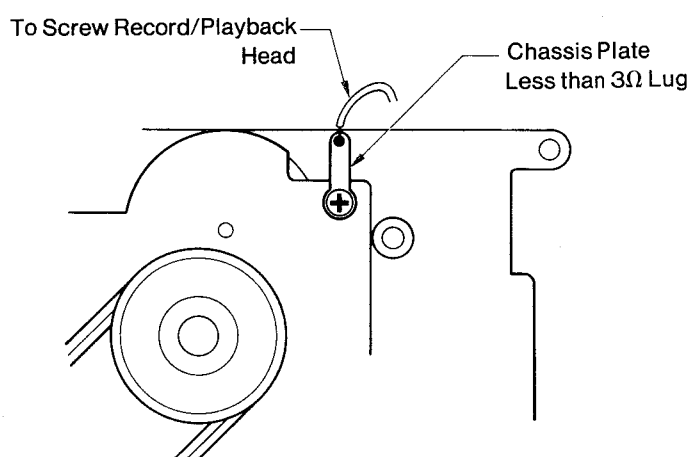
When replacing, cut 1.5 ~ 3mm of the part indicated in the illustration.



NOTICE ON REASSEMBLY

When reassembling the mechanism, check if the resistance between the screw fastening the Record/Playback Head and the Lug attached to the Chassis Plate is less than 3Ω.

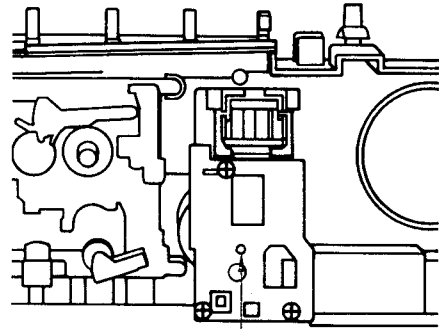
When the resistance is more, there will be noise during recording or playback of the cassette tape.



ELECTRICAL ADJUSTMENTS

EQUIPMENT REQUIRED

- VTVM (2 sets)
- Frequency Counter
- Dummy Load (47k Ω)
- Audio Signal Generator
- Attenuator
- Dualtrace Synchroscope
- DC Constant-voltage Regulator
- Test Tapes
 - * 3kHz Test Tape (Example: TEAC MTT-111) for Tape Speed Adjustment
 - * 10kHz Test Tape (Example: TEAC MTT-114) for Head Azimuth Adjustment
 - * 400Hz Test Tape for Dolby Calibration Level (Example: TEAC MTT-150) for Playback Sensitivity Adjustment
- Test Tapes for Recording and Playback Operations
 - * Chromium Dioxide Tape (Example: TDK AC-512)
 - * Metal Tape (Example: TDK AC-711)
- Alignment Tool



Potentiometer for Tape Speed Adjustment

Unless especially specified, set the unit and measuring instruments as follows:

- Function Switch LINE
- Dolby NR Switch OFF
- Tape Select Switch NORMAL
- Beat Cancel Switch 2
- Volume Control Minimum (0)
- Audio Signal Generator output 1kHz, 0dB (1V)

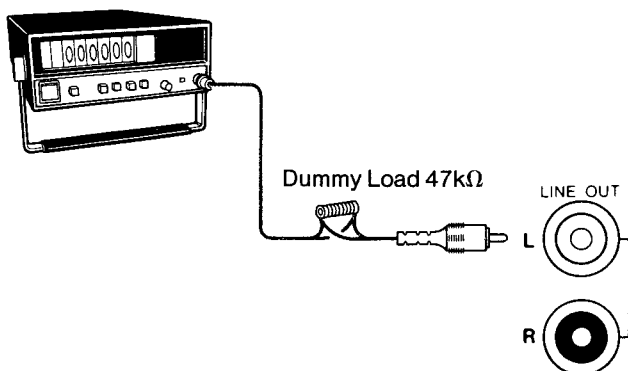
NOTE:

- * The Electrical Adjustment should be performed in the order as described below.
- * Supply 12V DC from the constant-voltage regulator to the Ext. Power Jack.

TAPE SPEED ADJUSTMENT

1. Remove the Radio Chassis from the unit and connect a frequency counter to the left or right channel LINE OUT as illustrated. Then, insert a 3kHz test tape (Example: TEAC MTT-111) into the cassette compartment.

Frequency Counter



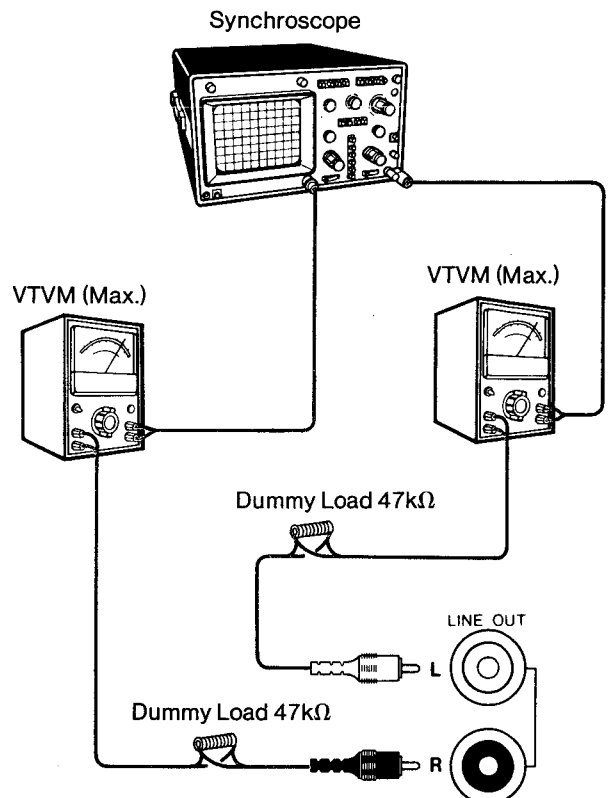
2. Adjust the tape speed by slowly turning the potentiometer inside the Motor until the frequency counter reads 3,000Hz (± 30 Hz).

HEAD AZIMUTH ADJUSTMENT

1. Connect a dualtrace synchroscope and a VTVM to both channel LINE OUT as illustrated.

Then, set the dualtrace synchroscope as follows:

- * MODE CHOP (chopped)
- * SOURCE INT (internal), CH1 or CH2
- * SWEEP MODE AUTO (automatic)

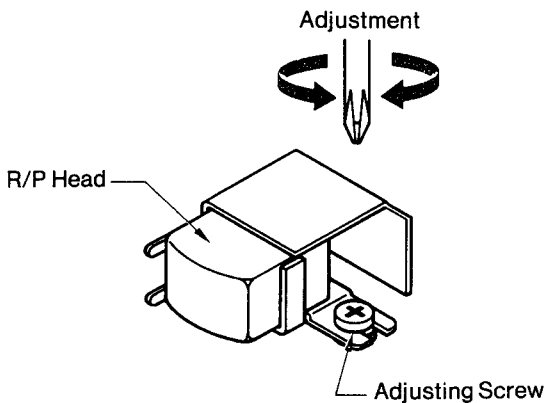
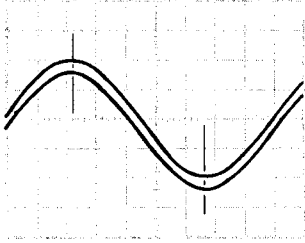


NOTE:

Adjust the field on the synchroscope with the VOLT. ADJ. and TIME ADJ.

ELECTRICAL ADJUSTMENTS (Continued)

2. Insert a 10kHz test tape (Example: TEAC MTT-114) into the cassette compartment. While playing back the test tape, turn the azimuth adjusting screw until the wave forms of the right and left channels are superimposed and set to optimum at maximum reading on the VTVM.



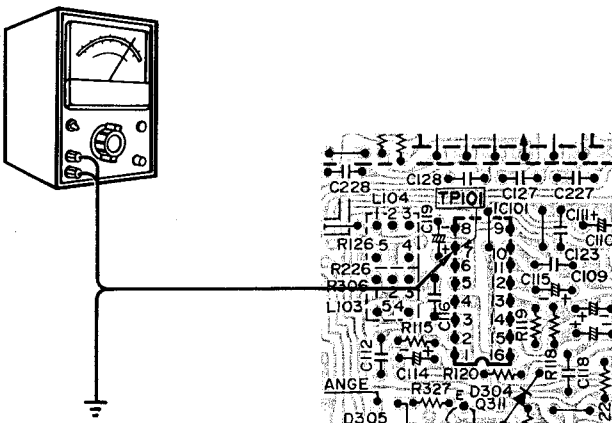
3. After the adjustment, secure the adjusting screw with paint or glue.

PLAYBACK SENSITIVITY ADJUSTMENT

LEFT CHANNEL

1. Connect a VTVM to the test point TP101 as illustrated and insert a 400Hz test tape for Dolby Calibration Level (Example: TEAC MTT-150) into the cassette compartment.

VTVM 580mV



Test Point TP101

2. Check that the VTVM reads 580mV for the output of the left channel while playing back the test tape.
3. If necessary, adjust the output to the specified one by turning the potentiometer (P102) while the test tape is played back.

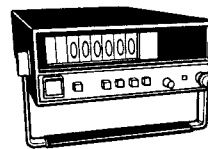
RIGHT CHANNEL

Connect the VTVM to the test point TP201. Then, adjust the potentiometer (P202) for the right channel by following the same procedure as in LEFT CHANNEL.

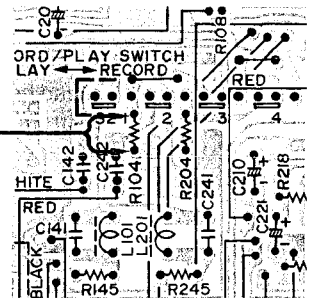
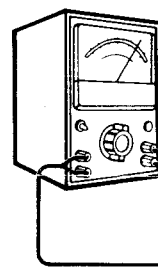
OSCILLATION FREQUENCY ADJUSTMENT

1. Connect a VTVM across the resistor R104 and a frequency counter to the output terminal of the VTVM as illustrated.

Frequency Counter



VTVM



2. Insert a cassette tape into the cassette compartment and set the OSC Switch to the position 2. Then, set the unit in the recording mode.
3. Turn the core of the oscillation transformer (T301) with an alignment tool until the frequency counter reads 60kHz [± 50 Hz].

RECORD & PLAYBACK FREQUENCY RESPONSE ADJUSTMENT

Chromium Dioxide Tape

Set the Tape Select Switch to "CrO₂" and insert a chromium dioxide tape (Example: TDK AC-512) into the cassette compartment. Then, make the adjustment by the following procedures.

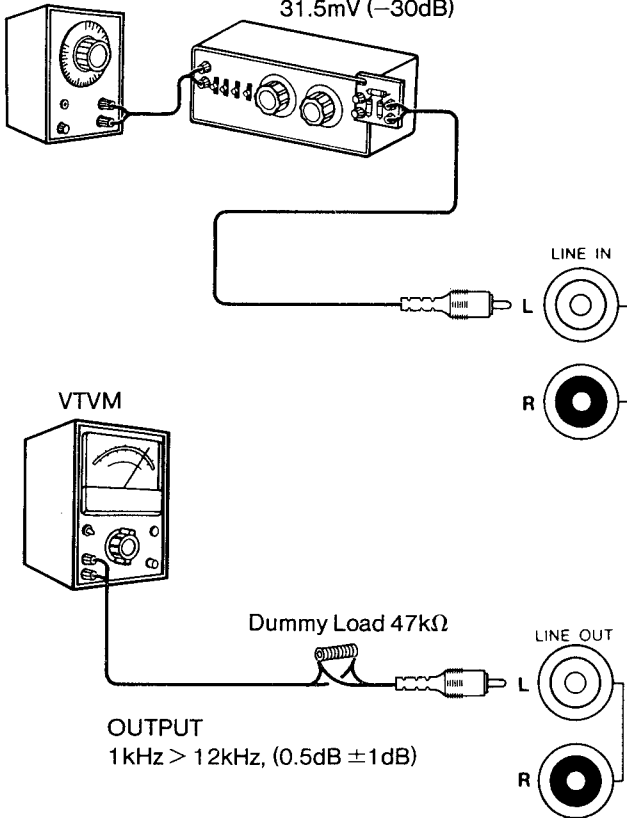
LEFT CHANNEL

1. Connect an audio signal generator and an attenuator to the left channel LINE IN, and a VTVM to the left channel LINE OUT as illustrated.

ELECTRICAL ADJUSTMENTS (Continued)

Audio Signal Generator
1kHz and 12kHz

Attenuator
31.5mV (−30dB)



2. Alternately record the 1kHz and 12kHz signals from the audio signal generator at 31.5mV (−30dB) on the tape several times.
3. Check that the 12kHz signal output is identical to the 1kHz signal output or the deviation is 0.5dB (±1dB) on the VTVM while playing back the recorded signals.
4. If necessary, adjust the output by turning the potentiometer (P101) and re-check the output of each signal by playing back the signals after recording operation of the signals.
5. Repeat the above adjustment until the specified output is obtained.

RIGHT CHANNEL

Connect the audio signal generator and the attenuator to the right channel LINE IN, and the VTVM to the right channel LINE OUT. Then, adjust the potentiometer (P201) for the right channel by following the same procedure as in LEFT CHANNEL.

RECORD & PLAYBACK SENSITIVITY ADJUSTMENT

• Metal Tape

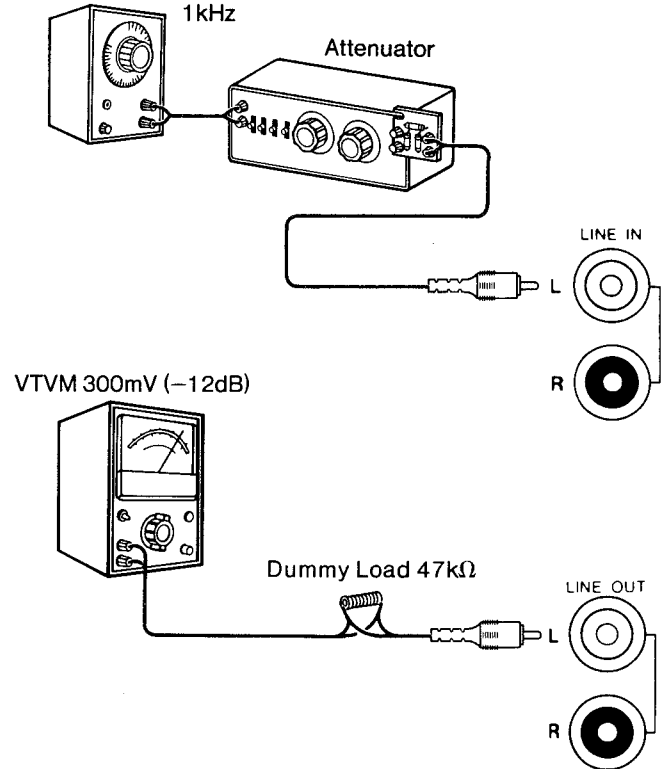
Set the Tape Select Switch to “METAL” and insert a metal tape (Example: AC-711) into the cassette compartment. Then, perform the adjustment by the following procedure.

LEFT CHANNEL

1. Connect an audio signal generator and an attenuator to the left channel LINE IN, and a VTVM to the left channel LINE OUT as illustrated.

Audio Signal Generator
1kHz

Attenuator



2. Set the unit in the record stand-by mode by pressing the Pause Button first, and then, the Record and Play Buttons simultaneously.
3. Feed a 1kHz signal from the audio signal generator into the unit and adjust the attenuator until the VTVM reads 300mV (−12dB). Then, record the signal on the tape by releasing the Pause Button.
4. While playing back the recorded signal, check that the signal output is 300mV (−12dB) on the VTVM.
5. If necessary, adjust the potentiometer (P103) and re-check the reading of the VTVM by playing back the signal after the recording operation for the signal.
6. Repeat the above adjustment until the specified output is obtained.

RIGHT CHANNEL

Connect the audio signal generator and the attenuator to the right channel LINE IN, and the VTVM to the right channel LINE OUT. Then, adjust the potentiometer (P203) for the right channel by following the same procedure as in LEFT CHANNEL.

TUNER ADJUSTMENT

EQUIPMENT REQUIRED

- AM Standard Signal Generator
- FM Standard Signal Generator
- Generator Scope
- Stereo Signal Generator
- Loop Antenna
- Dummy Antenna (30Ω/10pF) for SW2
- Dummy Antenna (75Ω, unbalanced type) for FM
- Ceramic Capacitor (10pF)
- Carbon Resistor (330kΩ)
- VTVM
- Frequency Counter

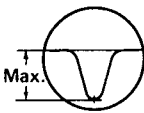
- Oscilloscope
- Dummy Load (3.2Ω)
- Alignment Tool
- Before performing the adjustment, set the switches and controls as follows:
 - * Function Switch RADIO
 - * Mode Switch MONO
 - * Tone Controls Max.
 - * Balance Control Center (click position)
 - * Volume Control Center

NOTE:

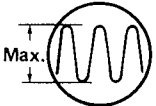
Use an alignment tool with plastic grip for all adjustments.

MW ALIGNMENT

Standard Test Frequency 400Hz and Modulation 30% at AM

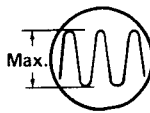
Step	Alignment	Connections		Frequency of Signal Generator	Tuning Dial Setting	Adjustments	Remarks
		INPUT	OUTPUT				
1	Calibration of IF for AM	Connect loop antenna to output terminal of gene-scope. Place loop antenna 60cm away from bar antenna.	Connect input terminal of gene-scope to detector output terminals (CN1-1 and CN1-2, or CN1-3).	455kHz	Low End	T3, T4 and T5	Obtain symmetrical curve and maximum amplitude. 
2	Calibration of Tuning Range	Connect loop antenna to output of AM signal generator. Place loop antenna 60cm away from bar antenna.	Connect VTVM with 3.2Ω dummy load and oscilloscope to Phones/Ext. Speaker jack.	510kHz			T9
3				1,670kHz	High End	TC5	
4	Adjustment of Tracking			600kHz	600kHz	L4-3 (bar ant. coil)	
5				1,400kHz	1,400kHz	TC2	
6	Repeat the above steps until no further change is noted in any of the adjustments.						

SW1 ALIGNMENT

Step	Alignment	Connections		Frequency of Signal Generator	Tuning Dial Setting	Adjustments	Remarks
		INPUT	OUTPUT				
1	Calibration of Tuning Range	Connect loop antenna to output of AM signal generator. Place loop antenna 60cm away from bar antenna.	Connect VTVM with 3.2Ω dummy load and oscilloscope to Phones/Ext. Speaker jack.	2.2MHz	Low End	T8	Obtain sine-wave of 400Hz and maximum amplitude. 
2				7.5MHz	High End	TC4	
3	Adjustment of Tracking			2.5MHz	2.5MHz	L4-1 (bar ant. coil)	
4				6.5MHz	6.5MHz	TC3 (PVC)	
5	Repeat the above steps until no further change is noted in any of the adjustments.						

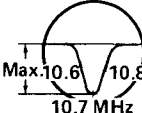
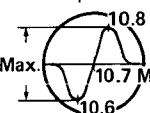
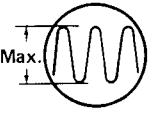
TUNER ADJUSTMENT (Continued)

SW2 ALIGNMENT

Step	Alignment	Connections		Frequency of Signal Generator	Tuning Dial Setting	Adjustments	Remarks
		INPUT	OUTPUT				
1	Calibration of Tuning Range	Connect AM signal generator to antenna terminals (TP1 and TP2) through dummy antenna (30Ω/10pF).	Connect VTVM with 3.2Ω dummy load and oscilloscope to Phones/Ext. Speaker jack.	7.2MHz	Low End	T7	Obtain sine-wave of 400Hz and maximum amplitude. 
2				23.7MHz	High End	TC3	
3	Adjustment of Tracking			8.5MHz	8.5MHz	T6	
4				21.0MHz	21.0MHz	TC1	
5	Repeat the above steps until no further change is noted in any of the adjustments.						

FM ALIGNMENT

Standard test frequency 400Hz and deviation 22.5kHz

Step	Alignment	Connections		Frequency of Signal Generator	Tuning Dial Setting	Adjustments	Remarks
		INPUT	OUTPUT				
1	Calibration of IF	Place output of gene-scope to Pin 3 of IC1 through capacitor (10pF).	Connect input terminal of gene-scope to detector output terminals (CN1-1 and CN1-2, or CN1-3).	10.7MHz	Low End	Turn T2(blue core) fully counter-clockwise T1.	Obtain symmetrical curve and maximum amplitude. 
2						T2 (blue core)	Obtain S curve and maximum amplitude. 
3	Calibration of Tuning Range	Connect FM signal generator to antenna terminals (TP1 and TP2) through dummy antenna (75Ω, unbalanced type).	Connect VTVM with 3.2Ω dummy load and oscilloscope to Phones/Ext. Speaker jack.	87.2MHz	High End	L2	Obtain sine-curve and maximum amplitude. 
4				109.0MHz		TC2 (PVC)	
5	Adjustment of Tracking			90MHz		L1	
6				106MHz		TC1 (PVC)	
7	Repeat the above steps until no further change is noted in any of the adjustments.						

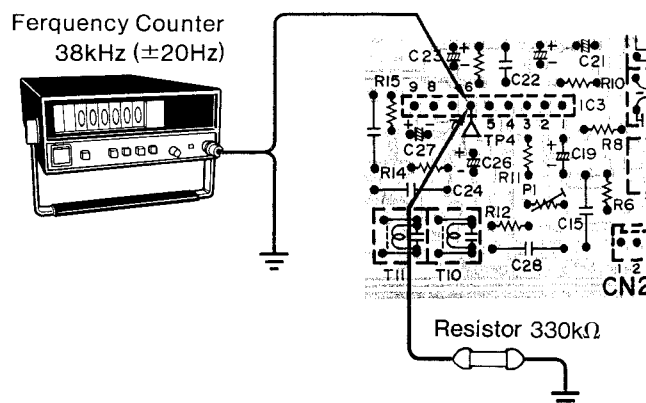
FM MPX (Multiplex) ADJUSTMENT

Before the adjustment, set the switches as follows:

- Function Select Switch RADIO ON
- Band Select Switch FM
- Mode Switch STEREO

38kHz (V.C.O.) ADJUSTMENT

1. Connect a Frequency counter and a resistor (330kΩ) to the sixth pin (Test Point TP4) in IC3 (TA7343P) as illustrated.
2. Adjust the potentiometer (P1) until the oscillation frequency of IC3 becomes 38kHz (±20Hz).



DIAL CORD STRINGING

Mount the Drum on the Radio Chassis as illustrated and fully turn the shaft of the variable capacitor counterclockwise.

Mount the Radio Tuner P.C.Board on the Radio Chassis and then, insert the shaft of the variable capacitor into the Drum.

Tie the Dial Cord of length 1,100mm (effective length: 960mm) and diameter $\phi 0.5$ to the Spring and hook the Spring to the illustrated position of the drum.

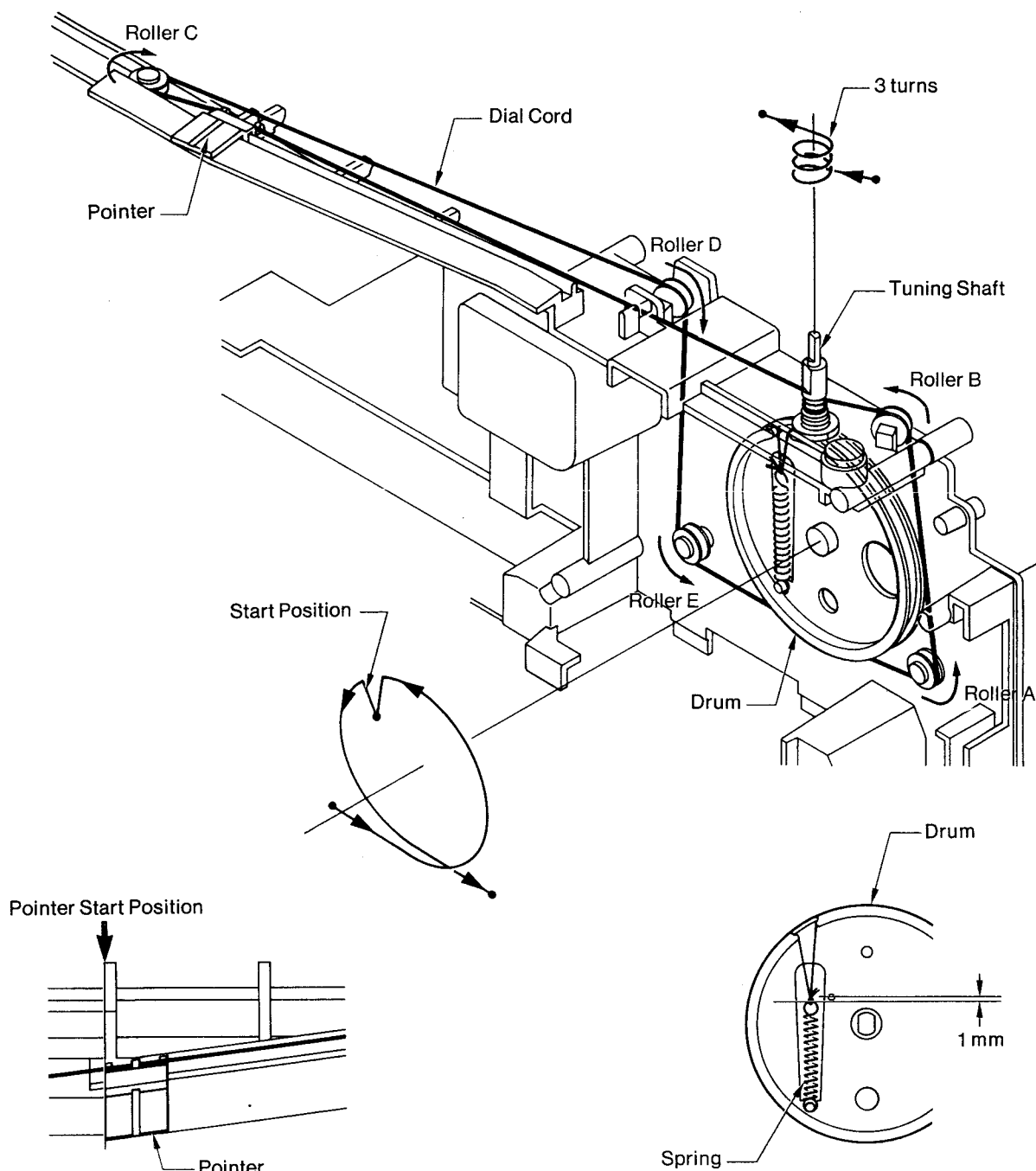
Engage the Dial Cord as illustrated in the following order.
Spring $\rightarrow$ Drum $\rightarrow$ Roller A $\rightarrow$ Roller B $\rightarrow$ Tuning Shaft (3 turns) $\rightarrow$ Roller C $\rightarrow$ Roller D $\rightarrow$ Roller E $\rightarrow$ Drum $\rightarrow$ Spring

5. Hook the Dial Cord to the Spring and tie the Cord where the spring tip expands to the mark on the Drum as illustrated.

6. Secure the place where the Spring is hooked to the Drum and knot in the dial cord with paint or glue.

7. Turn the Tuning Shaft counterclockwise until it stops and then, set the Pointer on the Radio Chassis as illustrated.

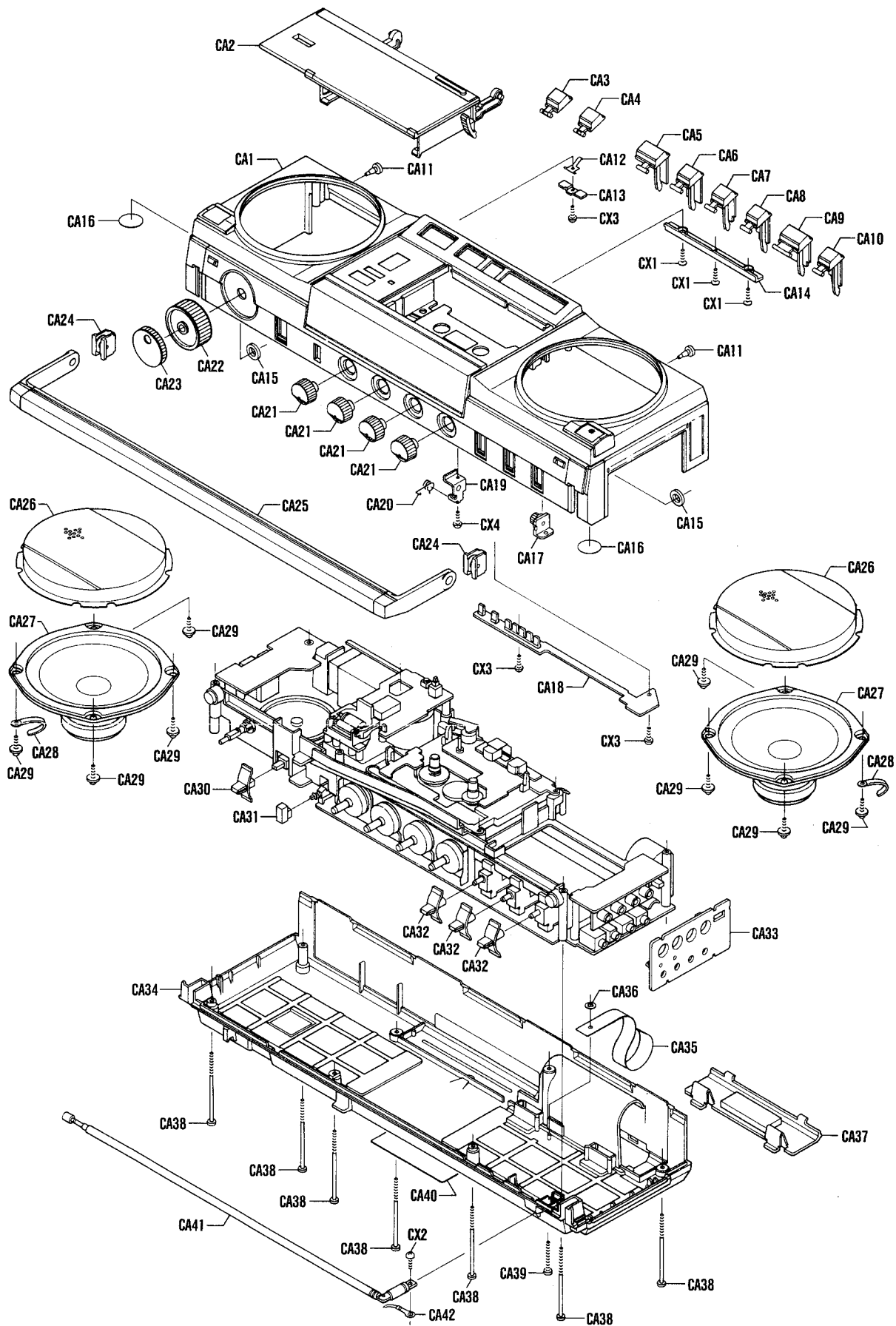
8. Secure the Pointer with paint or glue.



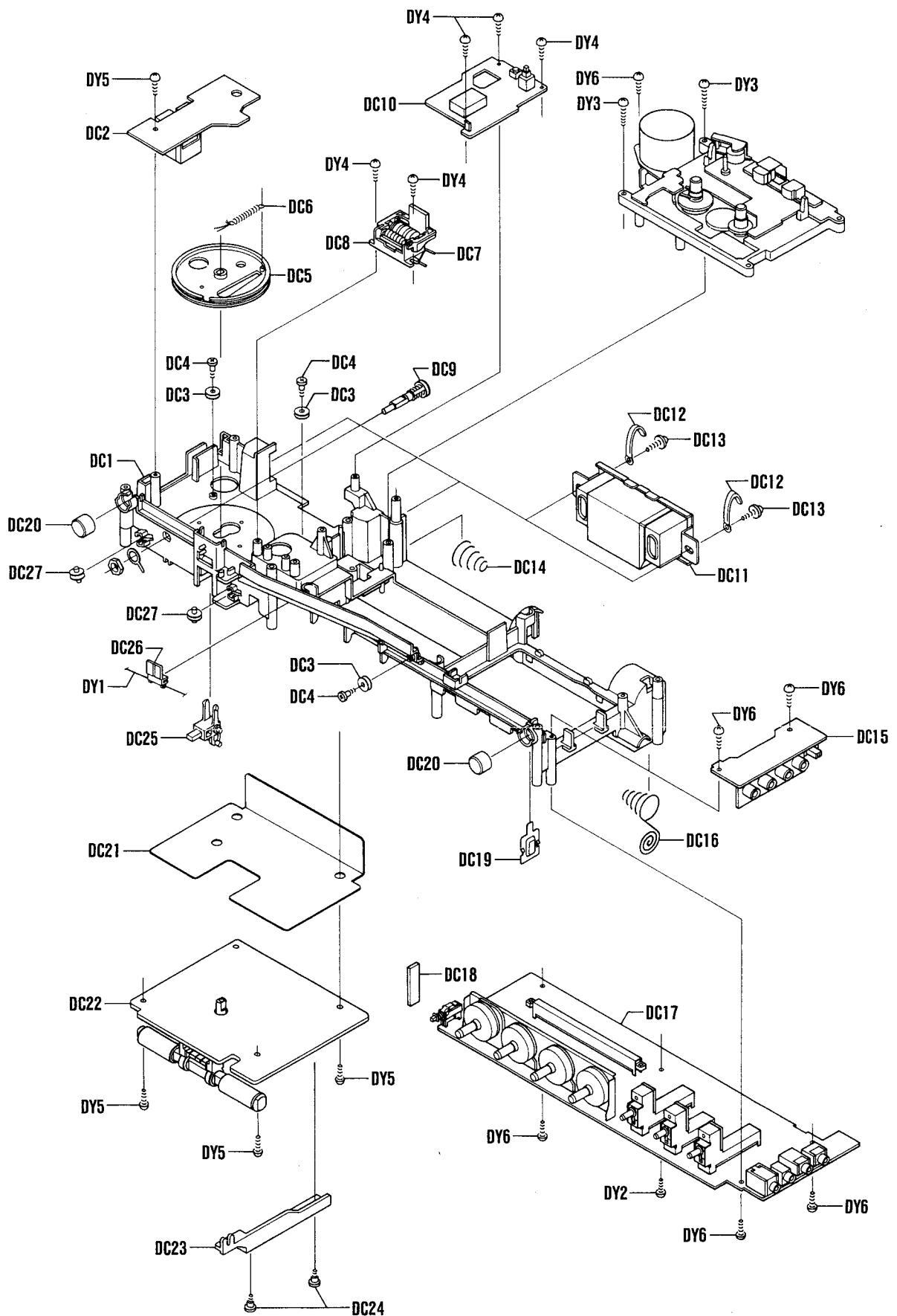
PARTS LIST

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
PACKAGE							
141	6 1419 66800	Individual Carton (Silver)	1	CA38	141 2 4219 09800	Screw +M3.0x65	7
141	6 1419 66802	Individual Carton (Blue)	1	CA39	141 2 4219 13000	Screw +M3.0x25	1
141	6 1449 84800	Styrofoam Case, Left	1	CA40	141 2 1419 15401	Rating Plate	1
141	6 1449 84900	Styrofoam Case, Right	1	CA41	4 2449 70062	Antenna	1
141	6 2519 13990	Poly Cover	1	CA42	4 2379 70650	Ring Terminal	1
141	6 2519 23033	Poly Cover 230 x 330	1	CX1	102 3 1202 60811	Screw, Flat Hd. Tapping-1 +M2.6x8	3
141	6 4559 00100	Serial No. Sheet	3	CX2	102 3 1303 01011	Screw, Pan Hd. Tapping-1 +M3.0x10	1
				CX3	143 3 1302 60611	Screw, Pan Hd. Tapping-B +M2.6x6	3
				CX4	143 3 1302 60811	Screw, Pan Hd. Tapping-B +M2.6x8	1
ACCESSORIES				RADIO CHASSIS			
	4 2369 72251	Plug Adaptor Assy	1		4 2359 75729	Connector 4P Assy [CN4]	1
	4 2419 72493	Cassette	1	DC1	141 2 3119 18201	Chassis Radio	1
△	4 2439 70490	Cord Power	1	DC2	4 1919 71650	Power Supply P.C.B. Assy [See PCB5]	1
141	6 4729 01900	Caution Label	1	DC3	141 2 5519 03300	Dial Roller A	3
141	6 4729 32400	POP Label	1	DC4	141 2 4219 14000	Screw	3
142	6 4119 31650	Instruction Book	1	DC5	141 2 5389 03400	Drum	1
CABINET				DC6	141 2 8519 78000	Spring, Stop	1
	4 2359 76050	Connector 4P Assy [CN6]	1	DC7	141 2 5649 07700	Counter Belt	1
CA1	141 0 1119 89001	Cabinet Top Assy (Silver)	1	DC8	141 2 8119 11500	Counter	1
CA1	141 0 1119 89003	Cabinet Top Assy (Blue)	1	DC9	4 2249 70301	Fine Tuner [FT1]	1
CA2	141 0 1249 23301	Cassette Lid Assy	1	DC10	4 1329 78460	AMSS Program P.C.B. Assy [See PCB3]	1
CA3	141 2 1659 11000	AMSS Button	1	DC11	△ 4 2519 73800	Power Trans [T701]	1
CA4	141 2 1659 10900	Rec. Mute Button	1	DC12	141 2 4729 03400	Lug	2
CA5	141 2 1659 10800	Eject Button	1	DC13	141 2 4219 10400	Poly Wave Screw	2
CA6	141 2 1659 10700	Pause Button	1	DC14	141 2 3829 20800	Spring, Battery	1
CA7	141 2 1659 10600	F.FWD Button	1	DC15	4 1329 78440	Jack P.C.B. Assy [See PCB4]	1
CA8	141 2 1659 10500	Rewind Button	1	DC16	141 2 3829 18000	Spring, Terminal	1
CA9	141 2 1659 10400	Play Button	1	DC17	4 1329 78471	Amplifier P.C.B. Assy [See PCB1]	1
CA10	141 2 1659 10300	Recod Button	1	DC18	141 2 4469 44000	Cushion, Volume	1
CA11	141 2 1749 03100	Foot	2	DC19	141 2 3829 06700	Battery Terminal Anode	1
CA12	141 2 8539 48900	Spring Switch	1	DC20	4 1539 70661	Microphone [BM1 & BM2]	2
CA13	141 2 2629 05000	Switch Knob Holder	1	DC21	141 2 3229 40500	Shield Plate AC	1
CA14	141 2 2629 04900	Button Holder	1	DC22	4 1259 71900	Radio Tuner P.C.B. Assy [See PCB2]	1
CA15	141 2 4469 31701	Cushion, Mike	2	DC23	141 2 7319 56200	Plate Band Switch	1
CA16	4 1519 71211	Speaker (300Ω) [SP102 & SP202]	2	DC24	141 2 4219 29700	Screw	2
CA17	141 0 5519 08502	Eject Gear Assy	1	DC25	141 2 6219 03900	Band Switch Lever	1
CA18	4 1329 78450	LED Indicator P.C.B. Assy [See PCB6]	1	DC26	141 2 5119 08300	Pointer	1
CA19	141 2 2629 05100	Bracket, Cassette Lid	1	DC27	141 2 8259 05900	Dial Roller	2
CA20	141 2 8549 16300	Spring, Cassette Lid	1	DY1	628 3 0911 00000	String, φ0.5	1
CA21	141 2 1639 51400	Volume Knob	4	DY2	101 3 1302 60611	Screw, Pan Hd. +M2.6x6	1
CA22	141 2 1639 53100	Tuning Knob	1	DY3	102 3 1303 01611	Screw, Pan Hd. Tapping-1 +M3.0x16	2
CA23	141 2 1639 53200	Fine Knob	1	DY4	143 3 1302 60811	Screw, Pan Hd. Tapping-B +M2.6x8	5
CA24	141 2 2719 18500	Handle Holder	2	DY5	143 3 1303 00811	Screw, Pan Hd. Tapping-B +M3.0x8	4
CA25	141 0 1719 10501	Handle Assy (Silver)	1	DY6	143 3 1303 01011	Screw, Pan Hd. Tapping-B +M3.0x10	6
CA25	141 0 1719 10502	Handle Assy (Blue)	1	NOTES:			
CA26	141 2 1519 37201	Grille Speaker	2	1. Parts order must contain Model Number, Part Number and Description.			
CA27	4 1519 71401	Speaker (3.2Ω) [SP101 & SP201]	2	2. Ordering quantity of screws and resistors must be multiple of 10 pcs.			
CA28	141 2 4729 03400	Lug	2				
CA29	141 2 4219 11600	Screw	8				
CA30	141 2 1629 07200	Band Lever Knob	1				
CA31	141 2 1659 11101	Switch Knob	1				
CA32	141 2 1629 07100	Lever Switch Knob	3				
CA33	141 2 3679 31503	Jack Plate (Silver)	1				
CA33	141 2 3679 31507	Jack Plate (Blue)	1				
CA34	141 2 1119 85401	Cabinet Bottom (Silver)	1				
CA34	141 2 1119 85402	Cabinet Bottom (Blue)	1				
CA35	141 2 2149 02600	Battery Ribbon	1				
CA36	141 2 4569 05100	Ring	1				
CA37	141 0 1339 11000	Battery Lid Assy (Silver)	1				
CA37	141 0 1339 11001	Battery Lid Assy (Blue)	1				

CABINET EXPLODED VIEW



RADIO CHASSIS EXPLODED VIEW



MECHANISM PARTS LIST

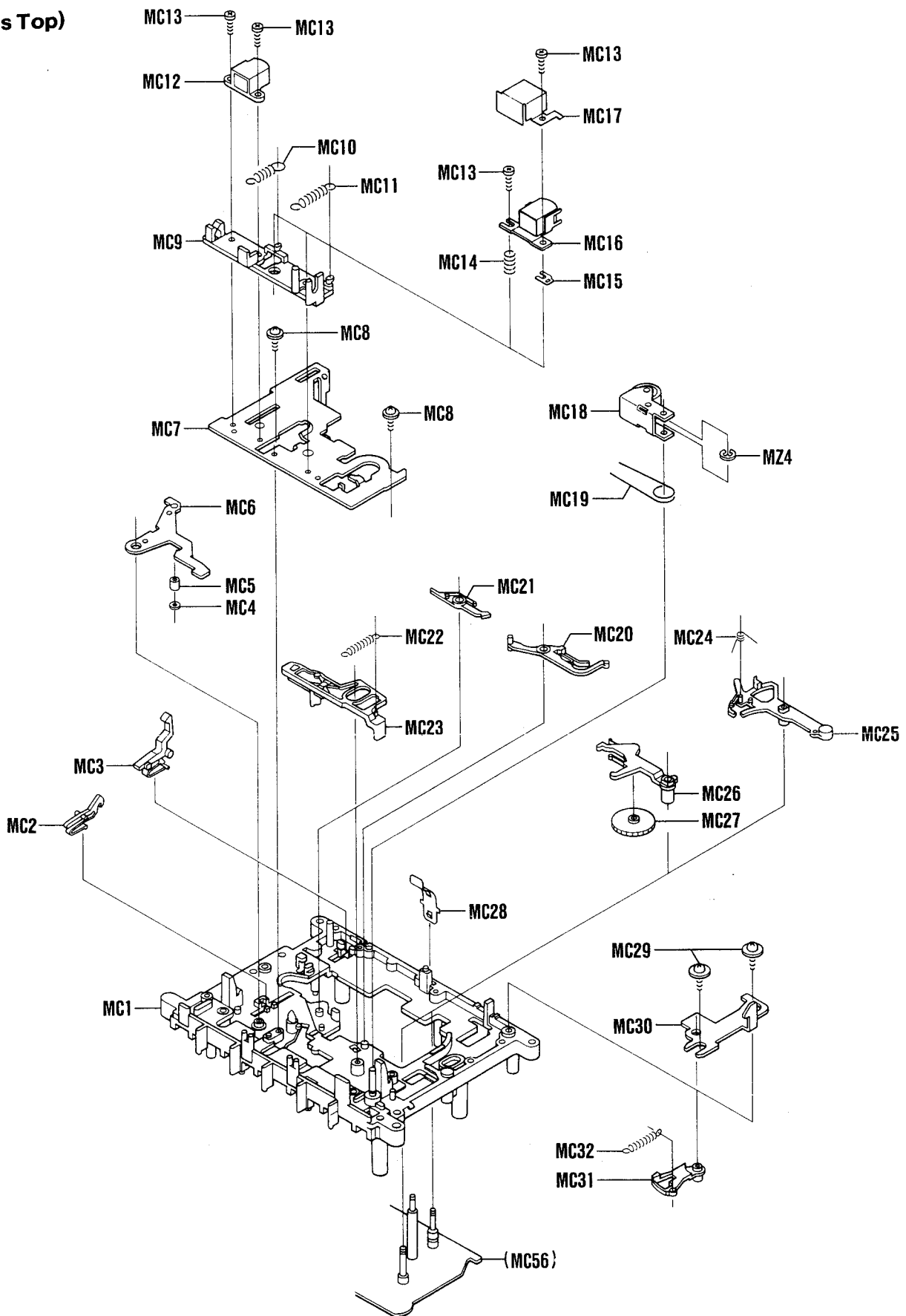
Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
MECHANISM				MC63	141 2 8559 04700	Spring, Pulley	1
	4 2359 75886	Connector 5P Assy [CN5]	1	MC64	141 2 4729 01900	Lug	1
MC1	141 0 3119 21900	Chassis Assy	1	MC65	141 2 5519 45600	ASO Gear	1
MC2	141 2 7419 81300	Cassette Lever	1	MC66	141 2 4539 28001	Washer	1
MC3	141 2 8419 11700	Interlock Lever	1	MC67	141 2 7419 80200	Rewind Lever	1
MC4	141 2 4539 17500	Washer	1	MC68	141 2 5319 11600	Supply Reel Gear	1
MC5	141 2 8259 11100	Roller Rec.	1	MC69	141 2 8519 67900	Spring, Reel	1
MC6	141 0 7419 36900	Lever Rec. Base Assy	1	MC70	141 2 8559 00100	Spring, Supply	2
MC7	141 2 7319 52801	Slide Base	1	MC71	141 2 5319 11700	Fin Reel Supply	1
MC8	141 2 4219 13201	Screw, w/Washer	2	MC72	141 2 4539 15700	Washer	2
MC9	141 2 3529 35900	Spacer, Head	1	MC73	141 0 5519 09600	Friction Assy	1
MC10	141 2 8519 64900	Spring, Gear Arm	2	MC74	141 2 7439 30000	Fastwind Arm	1
MC11	141 2 8549 18700	Spring, Base Slide	1	MC75	141 2 5519 45100	Fastwind Gear	1
MC12	4 2429 71990	Erase Head [HD2]	1	MC76	141 2 5319 11500	Take-up Reel Gear	1
MC13	141 2 4219 30300	Screw, Bind Hd.	4	MC77	141 2 8529 12700	Spring, F.FWD Arm	1
MC14	141 2 8559 00201	Spring, Head	1	MC78	4 2319 74362	Leaf Switch (Power) [S12]	1
MC15	141 2 3529 18102	Spacer, Head	1	MC79	141 2 7319 53600	Lock Plate	1
MC16	4 2429 71676	R/P Head [HD1]	1	MC80	141 2 7319 53000	Stop Rod	1
MC17	141 2 3229 40600	Shield Plate Head	1	MC81	141 2 7319 53100	Pause Rod	1
MC18	141 0 5419 02201	Pinch Roller Assy	1	MC82	141 2 7319 53200	Rod Fastwind	1
MC19	141 2 8529 12500	Spring, Pinch Roller	1	MC83	141 2 7319 53300	Rod Rewind	1
MC20	141 2 7149 05700	Brake, Take-up Reel	1	MC84	141 2 8529 14300	Spring, Seesaw	1
MC21	141 2 7149 05600	Brake, Supply Reel	1	MC85	141 2 7319 53400	Play Rod	1
MC22	141 2 8549 05500	Spring, Stop Lever	1	MC86	141 2 7319 53500	Record Rod	1
MC23	141 2 7419 80700	Slide Base Lever	1	MC87	141 2 8529 12600	Spring, Gear Actate Play	1
MC24	141 2 8529 13200	Spring, Sensor	1	MC88	141 2 5519 45800	Actuate Gear Pause	1
MC25	141 2 7419 80100	ASO Lever	1	MC89	141 2 7319 54900	ASO Rod	1
MC26	141 2 7439 30100	Take-up Arm	1	MC90	141 2 7319 52900	Switch Rod	1
MC27	141 2 5519 45300	Take-up Gear	1	MC91	141 2 5519 45900	Actuate Play Gear	1
MC28	141 2 8539 47900	Spring, Cassette	1	MC92	141 2 7419 80400	Record Lock Lever	1
MC29	141 2 4219 05400	Screw, w/Washer	2	MC93	141 2 6139 14300	Frame Rod	1
MC30	141 2 7319 55800	Plate Eject	1	MC94	141 2 8529 12800	Spring, Pause Latch	1
MC31	141 2 7419 81100	Stop Eject Lever	1	MC95	141 2 8529 12401	Spring, F.FWD Rod	3
MC32	141 2 8549 18500	Spring, Eject	1	MC96	141 2 8539 46700	Spring, Plate Lock	1
MC33	141 2 7419 81500	Lever Lock Button	1	MC97	141 2 7419 81000	Record Stop Lever	1
MC34	141 2 7419 82700	Plunger Lever	1	MC98	141 2 7419 80900	Spring, Record Stop Lever	1
MC35	141 2 8549 04400	Spring, Interlock	1	MC99	141 2 8529 14200	Spring, Record Stop	1
MC36	141 2 5529 17000	Spindle Lever	1	MC100	141 2 7419 80800	Cue Review Switch Lever	1
MC37	4 5279 71221	Motor [M1]	1	MC101	141 2 7419 80500	Play Start Lever	1
MC38	141 2 3519 62800	Flywheel Support	1	MC102	141 2 7419 80600	Pause Start Lever	1
MC39	141 2 4459 11800	Cushion, Motor	3	MC103	141 2 8529 13300	Spring, Pause Lever	1
MC40	141 2 4219 30100	Screw	3	MC104	4 2319 74550	Leaf Switch (Play Mute) [S10]	1
MC41	4 2649 70490	Solenoid [SL1]	1	MC105	4 2319 71863	Leaf Switch (AMSS) [S11]	1
MC42	141 2 8419 12800	R/P Switch Lever	1	MZ1	101 3 1302 00811	Screw, Pan Hd.	+M2.0x8 1
MC43	141 2 7539 25200	Post R/P Switch Lever	1	MZ2	101 3 1702 00811	Screw, Bind Hd.	+M2.0x8 1
MC44	141 2 4729 04100	Lug	1	MZ3	112 3 1301 20082	E Ring	M1.2 1
MC45	141 2 7419 81400	Record Arm	1	MZ4	112 3 1302 00082	E Ring	M2.0 1
MC46	141 2 8549 19600	Spring, Record	1	MZ5	112 3 1303 00082	E Ring	M3.0 1
MC47	141 2 7419 81200	Record Select Lever	1	MZ6	143 3 1202 00818	Screw, Flat Hd. Tapping-B	+M2.0x8 1
MC48	141 2 4219 23000	Screw	1	MZ7	143 3 1702 00618	Screw, Bind Hd. Tapping-B	+M2.0x6 6
MC49	141 2 5739 06300	Flywheel Thrust	1	MZ8	143 3 1702 00818	Screw, Bind Hd. Tapping-B	+M2.0x8 2
MC50	141 2 5649 21300	Drive Belt	1	MZ9	143 3 1702 60818	Screw, Bind Hd. Tapping-B	+M2.6x8 3
MC51	141 2 5649 21200	Wind Belt	1				
MC52	141 2 5219 14500	Flywheel Capstan	1				
MC53	141 2 5519 45200	Flywheel Gear	1				
MC54	141 2 4539 20900	Washer	1				
MC55	141 2 4539 17600	Washer	1				
MC56	141 0 3119 21800	Plate Chassis Assy	1				
MC57	141 2 7419 82800	Shut-off Lever Switch	1				
MC58	141 2 3529 36100	Spacer, Lever	1				
MC59	141 2 4219 03000	Screw	1				
MC60	141 2 8519 61100	Spring, Slide	1				
MC61	141 2 5519 45700	Pulley Friction	1				
MC62	141 2 4539 27601	Washer	4				

NOTES:

- Parts order must contain Model Number, Part Number and Description.
- Ordering quantity of screws and resistors must be multiple of 10 pcs.

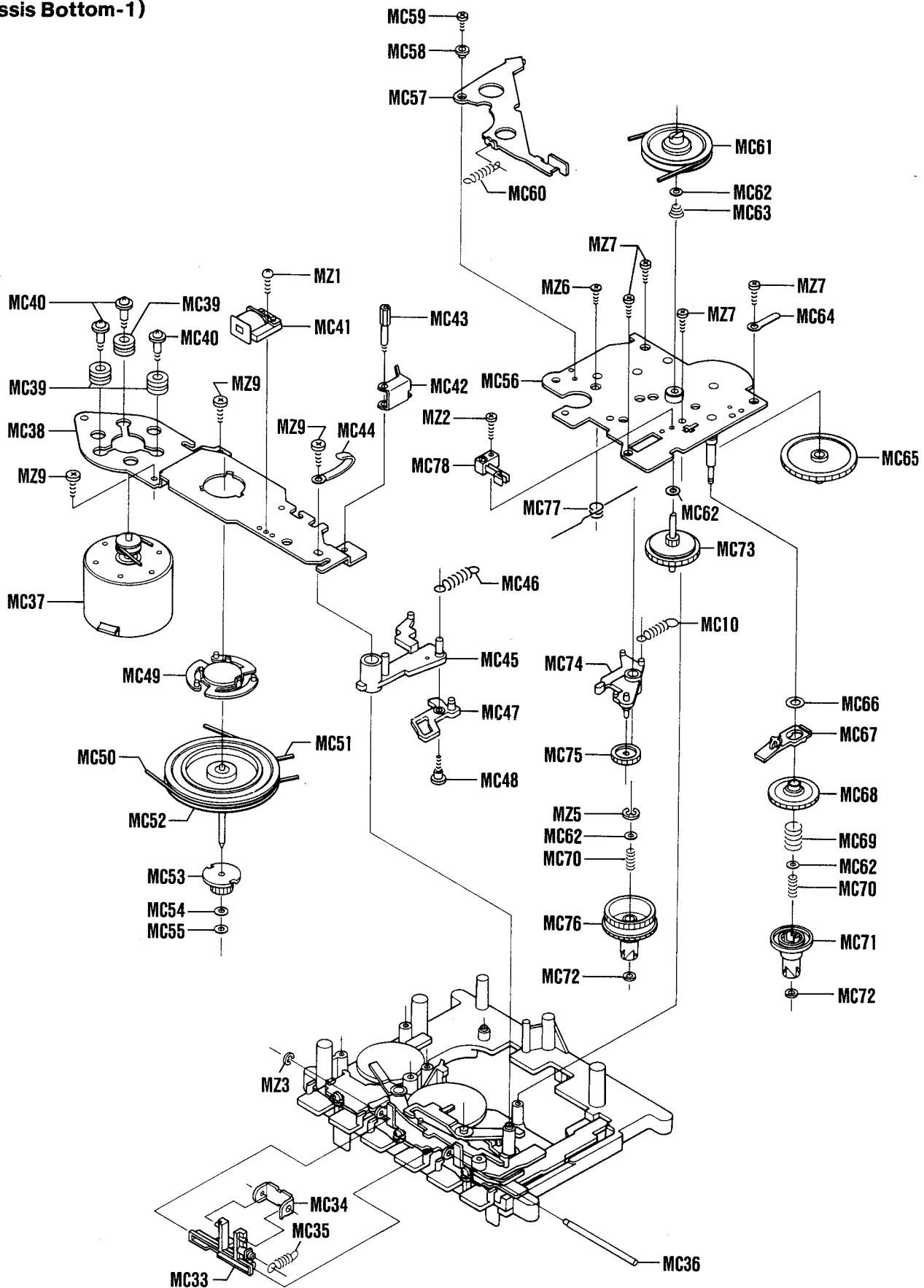
MECHANISM EXPLODED VIEW

(Chassis Top)



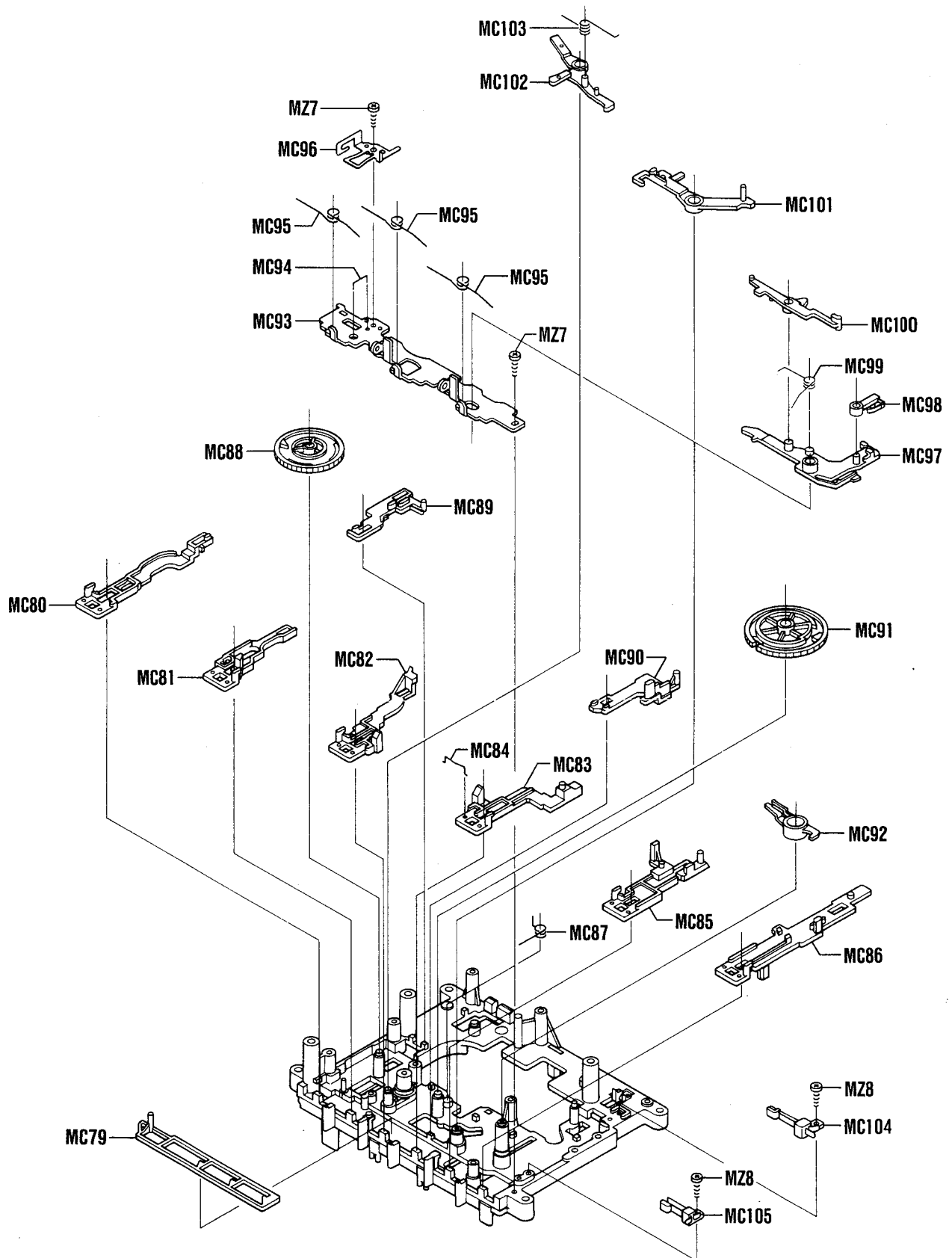
MECHANISM EXPLODED VIEW (Continued)

(Chassis Bottom-1)



MECHANISM EXPLODED VIEW (Continued)

(Chassis Bottom-2)



P.C.BOARD PARTS LIST

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
AMPLIFIER P.C.B. ASSY							
PCB1	4 1329 78471	Amplifier P.C.B. Assy	1	D202	4 2029 71440	Diode, 1SS95	1
	4 2539 70240	Bead Ferrite	1	D203	4 2029 71440	Diode, 1SS95	1
103	3 1303 01011	Screw, Pan Hd. Tapping-2 +M3.0x10	2	D204	202 5 9110 18820	Diode, 1S 188	1
141	2 3689 09500	Radiator IC (for IC302)	1	D301	4 2029 71440	Diode, 1SS95	1
141	2 4729 04700	Staple, 10mm	8	D302	4 2029 71440	Diode, 1SS95	1
141	2 4729 05000	Staple, 5mm	68	D303	4 2029 71440	Diode, 1SS95	1
141	2 4729 05800	Staple, 15mm	1	D304	4 2029 71440	Diode, 1SS95	1
CN1	4 2359 75851	Connector 4P Assy	1	D305	4 2029 71440	Diode, 1SS95	1
CN3	4 2369 73840	Connector 3P	1	D306	4 2029 71440	Diode, 1SS95	1
CN4	4 2369 73370	Connector 4P	1	D307	4 2029 71440	Diode, 1SS95	1
CN5	4 2369 73380	Connector 5P	1	D308	4 2029 71440	Diode, 1SS95	1
CN6	4 2369 73370	Connector 4P	1	D309	202 5 9600 44610	Diode, DS 446	1
S2	4 2319 75701	Slide Switch (Record/Play)	1	D310	4 2029 72470	Diode, MTA7.5	1
S3	4 2319 75342	Lever Switch (Tape Selct)	1	D311	202 5 3200 03311	Diode, GZA 3.3X	1
S4	4 2319 72463	Lever Switch (Mode)	1	D312	4 2029 71440	Diode, 1SS95	1
S5	4 2319 75342	Lever Switch (Function)	1	D313	4 2029 71440	Diode, 1SS95	1
S6	4 2319 75711	Push Switch (DOLBY NR)	1	IC101	4 2069 71650	IC, NE649N	1
J1	4 2359 71780	Jack 1P (Mixing Mike/Mike, Left)	1	IC201	4 2069 71650	IC, NE649N	1
J2	4 2359 73470	1P Jack (Mike, Right)	1	IC301	4 2069 71870	IC, BA3302	1
J3	4 2359 75701	Jack 5P (Headphones 1)	1	IC302	206 5 1984 50510	IC, LA 4505	1
J4	4 2359 75800	Jack 5P (Headphones 2/Ext. Speaker)	1	C101	CD1 0 4500 0002V	Electrolytic 0.1μF 50V	1
L101	4 2559 70130	Coil (33mH)	1	C102	CM47 2500 K00SV	Mylar 0.0047μF 50V ±10%	1
L102	4 2729 70230	Coil (2.2mH)	1	C103	CD4 7 5100 0000V	Electrolytic 4.7μF 10V	1
L103	4 2729 70550	Coil Filter	1	C104	CC8 2 1500 KE00C	Ceramic 820pF 50V ±10%	1
L104	4 2729 70541	Coil Filter	1	C105	CC3 3 1500 KE00C	Ceramic 330pF 50V ±10%	1
L201	4 2559 70130	Coil (33mH)	1	C106	CD4 7 6100 0000V	Electrolytic 47μF 10V	1
L202	4 2729 70230	Coil (2.2mH)	1	C107	CD1 0 6160 0000V	Electrolytic 10μF 16V	1
L203	4 2729 70550	Coil Filter	1	C108	CM27 3500 K00SV	Mylar 0.027μF 50V ±10%	1
L204	4 2729 70541	Coil Filter	1	C109	CD2 2 4500 0002V	Electrolytic 0.22μF 50V	1
L301	4 2539 70301	Micro Inductor (100μH)	1	C110	CD3 3 7160 0001V	Electrolytic 330μF 16V	1
L302	4 2539 70301	Micro Inductor (100μH)	1	C111	CC1 0 1500 KE00C	Ceramic 100pF 50V ±10%	1
T301	4 2589 71820	OSC Trans	1	C112	CM47 2500 K00SV	Mylar 0.0047μF 50V ±10%	1
VR1	4 2229 73980	Rotary Volume Unit	1	C113	CM56 2500 K00SV	Mylar 0.0056μF 50V ±10%	1
P101	4 2229 73037	Potentiometer (B-50kΩ)	1	C114	CD1 0 6160 0001V	Electrolytic 10μF 16V	1
P102	4 2229 72961	Potentiometer (B-300kΩ)	1	C115	CD1 0 6160 0001V	Electrolytic 10μF 16V	1
P103	4 2229 72968	Potentiometer (B-20kΩ)	1	C116	CM33 2500 K00SV	Mylar 0.0033μF 50V ±10%	1
P201	4 2229 73037	Potentiometer (B-50kΩ)	1	C117	CD2 2 7100 0001V	Electrolytic 220μF 10V	1
P202	4 2229 72961	Potentiometer (B-300kΩ)	1	C118	CM27 3500 K00SV	Mylar 0.027μF 50V ±10%	1
P203	4 2229 72968	Potentiometer (B-20kΩ)	1	C119	CD1 0 6160 0001V	Electrolytic 10μF 16V	1
Q101	203 5 5100 53660	Transistor, 2SC 536	1	C121	CA3 3 4100 K000V	Aluminum 0.33μF 10V ±10%	1
Q102	203 5 4921 01270	Transistor, 2SD1012	1	C122	CA1 0 4100 K000V	Aluminum 0.1μF 10V ±10%	1
Q103	203 5 5100 53660	Transistor, 2SC 536	1	C123	CM47 3500 K00SV	Mylar 0.047μF 50V ±10%	1
Q201	203 5 5100 53660	Transistor, 2SC 536	1	C124	CD4 7 4500 0000V	Electrolytic 0.47μF 50V	1
Q202	203 5 4921 01270	Transistor, 2SD1012	1	C125	CC8 2 2500 KE00C	Ceramic 0.0082μF 50V ±10%	1
Q203	203 5 5100 53660	Transistor, 2SC 536	1	C126	CM8 2 3500 K00SV	Mylar 0.082μF 50V ±10%	1
Q301	4 2039 70761	Transistor, 2SC 1583	1	C127	CM39 2500 K00SV	Mylar 0.0039μF 50V ±10%	1
Q302	203 5 5100 53660	Transistor, 2SC 536	1	C128	CM33 3500 K00SV	Mylar 0.033μF 50V ±10%	1
Q303	203 5 6900 40050	Transistor, 2SD400	1	C129	CM33 3500 K00SV	Mylar 0.033μF 50V ±10%	1
Q304	203 5 4570 73460	Transistor, 2SD 734	1	C131	CM1 0 4500 K00SV	Mylar 0.1μF 50V ±10%	1
Q305	203 5 5100 53660	Transistor, 2SC 536	1	C132	CC4 7 1500 KE00C	Ceramic 470pF 50V ±10%	1
Q306	203 5 5100 53660	Transistor, 2SC 536	1	C133	CM18 2500 K00SV	Mylar 0.0018μF 50V ±10%	1
Q307	203 5 5100 53660	Transistor, 2SC 536	1	C134	CM47 3500 K00SV	Mylar 0.047μF 50V ±10%	1
Q308	203 5 5100 53660	Transistor, 2SC 536	1	C135	CD1 0 5500 0000V	Electrolytic 1μF 50V	1
Q309	203 5 4570 73460	Transistor, 2SD 734	1	C136	CD1 0 5500 0000V	Electrolytic 1μF 50V	1
Q310	203 5 4570 73460	Transistor, 2SD 734	1	C137	CM47 3500 K00SV	Mylar 0.047μF 50V ±10%	1
Q311	203 5 4921 01270	Transistor, 2SD1012	1	C138	CC1 0 1500 KE00C	Ceramic 100pF 50V ±10%	1
Q312	203 5 4921 01270	Transistor, 2SD1012	1	C139	CM22 2500 K00SV	Mylar 0.0022μF 50V ±10%	1
Q313	203 5 5100 53660	Transistor, 2SC 536	1	C141	CC2 2 1500 KE00C	Ceramic 220pF 50V ±10%	1
D101	4 2029 71440	Diode, 1SS95	1	C142	CC3 3 1500 KE00C	Ceramic 330pF 50V ±10%	1
D102	4 2029 71440	Diode, 1SS95	1	C144	CC8 2 1500 KE00C	Ceramic 820pF 50V ±10%	1
D103	4 2029 71440	Diode, 1SS95	1	C145	CD4 7 6100 0001V	Electrolytic 47μF 10V	1
D104	202 5 9110 18820	Diode, 1S 188	1	C147	CC4 7 0500 KE00C	Ceramic 47pF 50V ±10%	1
D201	4 2029 71440	Diode, 1SS95	1	C148	CC1 0 3500 KE00C	Ceramic 0.01μF 50V ±10%	1
				C149	CD1 0 7100 0001V	Electrolytic 100μF 10V	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty		
C151	4 2239 70650	Capacitor	2200μF 10V	1	C318	CM1 5 3500 K00SV Mylar	0.015μF 50V ±10%	1	
C152	CM1 5 4500 K00SV	Mylar	0.15μF 50V ±10%	1	C319	CM6 8 2500 K00SV Mylar	0.0068μF 50V ±10%	1	
C201	CD1 0 4500 0002V	Electrolytic	0.1μF 50V	1	C320	CD1 0 6100 0001V	Electrolytic	10μF 10V	1
C202	CM4 7 2500 K00SV	Mylar	0.0047μF 50V ±10%	1	C321	CM6 8 2500 K00SV Mylar	0.0068μF 50V ±10%	1	
C203	CD4 7 5100 0000V	Electrolytic	4.7μF 10V	1	C322	CA1 0 5160 X000V	Aluminum	1μF 16V +40,-20%	1
C204	CC8 2 1500 KE00C	Ceramic	820pF 50V ±10%	1	C323	CP5 6 2101 J000V	Polypropylen	0.0056μF 100V ±5%	1
C205	CC3 3 1500 KE00C	Ceramic	330pF 50V ±10%	1	C324	CD4 7 7100 0001V	Electrolytic	470μF 10V	1
C206	CD4 7 6100 0000V	Electrolytic	47μF 10V	1	C325	CD1 0 7100 0001V	Electrolytic	100μF 10V	1
C207	CD1 0 6160 0000V	Electrolytic	10μF 16V	1	C326	CD1 0 7160 0001V	Electrolytic	100μF 16V	1
C208	CM2 7 3500 K00SV	Mylar	0.027μF 50V ±10%	1	C327	CD1 0 7160 0001V	Electrolytic	100μF 16V	1
C209	CD2 2 4500 0002V	Electrolytic	0.22μF 50V	1	C328	CI2 2 3250 KE00C	Boundary	0.022μF 25V ±10%	1
C210	CD3 3 7160 0001V	Electrolytic	330μF 16V	1	C329	CI2 2 3250 KE00C	Boundary	0.022μF 25V ±10%	1
C211	CC1 0 1500 KE00C	Ceramic	100pF 50V ±10%	1	C330	CI2 2 3250 KE00C	Boundary	0.022μF 25V ±10%	1
C212	CM4 7 2500 K00SV	Mylar	0.0047μF 50V ±10%	1	C331	CD1 0 5500 0000V	Electrolytic	1μF 50V	1
C213	CM5 6 2500 K00SV	Mylar	0.0056μF 50V ±10%	1	C332	CC4 7 0500 KE00C	Ceramic	47pF 50V ±10%	1
C214	CD1 0 6160 0001V	Electrolytic	10μF 16V	1	C333	CD2 2 4500 0002V	Electrolytic	0.22μF 50V	1
C215	CD1 0 6160 0001V	Electrolytic	10μF 16V	1	C334	CD2 2 4500 0002V	Electrolytic	0.22μF 50V	1
C216	CM3 3 2500 K00SV	Mylar	0.0033μF 50V ±10%	1	C335	CD1 0 6100 0001V	Electrolytic	10μF 10V	1
C217	CD2 2 7100 0001V	Electrolytic	220μF 10V	1	C336	CD1 0 6100 0001V	Electrolytic	10μF 10V	1
C218	CM2 7 3500 K00SV	Mylar	0.027μF 50V ±10%	1	C337	CD1 0 6100 0001V	Electrolytic	10μF 10V	1
C219	CD1 0 6160 0001V	Electrolytic	10μF 16V	1	R101	RP1 0 2121 JH000	Pretty Carbon	1kΩ 1/8W ±5%	1
C221	CA3 3 4100 K000V	Aluminum	0.33μF 10V ±10%	1	R102	RP4 7 2121 JH000	Pretty Carbon	4.7kΩ 1/8W ±5%	1
C222	CA1 0 4100 K000V	Aluminum	0.1μF 10V ±10%	1	R103	RP1 0 3121 JH000	Pretty Carbon	10kΩ 1/8W ±5%	1
C223	CM4 7 3500 K00SV	Mylar	0.047μF 50V ±10%	1	R104	RP1 0 0121 JH000	Pretty Carbon	10Ω 1/8W ±5%	1
C224	CD4 7 4500 0000V	Electrolytic	0.47μF 50V	1	R105	RP8 2 3121 JH000	Pretty Carbon	82kΩ 1/8W ±5%	1
C225	CC8 2 2500 KE00C	Ceramic	0.0082μF 50V ±10%	1	R106	RD1 5 1251 JS000	Carbon	150Ω 1/4W ±5%	1
C226	CM8 2 3500 K00SV	Mylar	0.082μF 50V ±10%	1	R107	RP4 7 1121 JH000	Pretty Carbon	470Ω 1/8W ±5%	1
C227	CM3 9 2500 K00SV	Mylar	0.0039μF 50V ±10%	1	R108	RD2 7 2251 JS000	Carbon	2.7kΩ 1/4W ±5%	1
C228	CM3 3 3500 K00SV	Mylar	0.033μF 50V ±10%	1	R109	RP1 8 2121 JH000	Pretty Carbon	1.8kΩ 1/8W ±5%	1
C229	CM3 3 3500 K00SV	Mylar	0.033μF 50V ±10%	1	R110	RP1 5 3121 JH000	Pretty Carbon	15kΩ 1/8W ±5%	1
C231	CM1 0 4500 K00SV	Mylar	0.1μF 50V ±10%	1	R111	RP2 7 3121 JH000	Pretty Carbon	27kΩ 1/8W ±5%	1
C232	CC4 7 1500 KE00C	Ceramic	470pF 50V ±10%	1	R112	RP1 0 3121 JH000	Pretty Carbon	10kΩ 1/8W ±5%	1
C233	CM1 8 2500 K00SV	Mylar	0.0018μF 50V ±10%	1	R113	RP1 0 4121 JH000	Pretty Carbon	100kΩ 1/8W ±5%	1
C234	CM4 7 3500 K00SV	Mylar	0.047μF 50V ±10%	1	R114	RP1 5 3121 JH000	Pretty Carbon	15kΩ 1/8W ±5%	1
C235	CD1 0 5500 0000V	Electrolytic	1μF 50V	1	R115	RP4 7 3121 JH000	Pretty Carbon	47kΩ 1/8W ±5%	1
C236	CD1 0 5500 0000V	Electrolytic	1μF 50V	1	R116	RP1 8 1121 JH000	Pretty Carbon	180Ω 1/8W ±5%	1
C237	CM4 7 3500 K00SV	Mylar	0.047μF 50V ±10%	1	R117	RP1 0 4121 JH000	Pretty Carbon	100kΩ 1/8W ±5%	1
C238	CC1 0 1500 KE00C	Ceramic	100pF 50V ±10%	1	R118	RP2 7 4121 JH000	Pretty Carbon	270kΩ 1/8W ±5%	1
C239	CM2 2 2500 K00SV	Mylar	0.0022μF 50V ±10%	1	R119	RP1 8 4121 JH000	Pretty Carbon	180kΩ 1/8W ±5%	1
C241	CC2 2 1500 KE00C	Ceramic	220pF 50V ±10%	1	R120	RP3 3 2121 JH000	Pretty Carbon	3.3kΩ 1/8W ±5%	1
C242	CC3 3 1500 KE00C	Ceramic	330pF 50V ±10%	1	R121	RP1 0 4121 JH000	Pretty Carbon	100kΩ 1/8W ±5%	1
C244	CC8 2 1500 KE00C	Ceramic	820pF 50V ±10%	1	R122	RP1 0 4121 JH000	Pretty Carbon	100kΩ 1/8W ±5%	1
C245	CD4 7 6100 0001V	Electrolytic	47μF 10V	1	R123	RP1 2 2121 JH000	Pretty Carbon	1.2kΩ 1/8W ±5%	1
C247	CC4 7 0500 KE00C	Ceramic	47pF 50V ±10%	1	R124	RP1 0 1121 JH000	Pretty Carbon	100Ω 1/8W ±5%	1
C248	CC1 0 3500 KE00C	Ceramic	0.01μF 50V ±10%	1	R125	RP1 0 3121 JH000	Pretty Carbon	10kΩ 1/8W ±5%	1
C249	CD1 0 7100 0001V	Electrolytic	100μF 10V	1	R126	RP2 2 0121 JH000	Pretty Carbon	22Ω 1/8W ±5%	1
C251	4 2239 70650	Capacitor	2200μF 10V	1	R127	RP4 7 2121 JH000	Pretty Carbon	4.7kΩ 1/8W ±5%	1
C252	CM1 5 4500 K00SV	Mylar	0.15μF 50V ±10%	1	R128	RP4 7 2121 JH000	Pretty Carbon	4.7kΩ 1/8W ±5%	1
C301	CD4 7 6100 0001V	Electrolytic	47μF 10V	1	R129	RP1 5 2121 JH000	Pretty Carbon	1.5kΩ 1/8W ±5%	1
C302	CD2 2 7160 0001V	Electrolytic	220μF 16V	1	R130	RP5 6 2121 JH000	Pretty Carbon	5.6kΩ 1/8W ±5%	1
C303	CD4 7 4100 0002V	Electrolytic	0.47μF 10V	1	R131	RP5 6 2121 JH000	Pretty Carbon	5.6kΩ 1/8W ±5%	1
C304	CD1 0 5500 0000V	Electrolytic	1μF 50V	1	R132	RP3 3 1121 JH000	Pretty Carbon	330Ω 1/8W ±5%	1
C305	CC4 7 1500 KE00C	Ceramic	470pF 50V ±10%	1	R133	RP2 2 2121 JH000	Pretty Carbon	2.2kΩ 1/8W ±5%	1
C307	CD2 2 6100 0000V	Electrolytic	22μF 10V	1	R134	RP4 7 2121 JH000	Pretty Carbon	4.7kΩ 1/8W ±5%	1
C308	CD2 2 5100 0001V	Electrolytic	2.2μF 10V	1	R135	RP3 3 2121 JH000	Pretty Carbon	3.3kΩ 1/8W ±5%	1
C309	CD4 7 7160 0001V	Electrolytic	470μF 16V	1	R136	RP2 2 2121 JH000	Pretty Carbon	2.2kΩ 1/8W ±5%	1
C310	CD1 0 6100 0001V	Electrolytic	10μF 10V	1	R137	RP8 2 2121 JH000	Pretty Carbon	8.2kΩ 1/8W ±5%	1
C311	CD4 7 7160 0001V	Electrolytic	470μF 16V	1	R138	RP1 8 3121 JH000	Pretty Carbon	18kΩ 1/8W ±5%	1
C312	CD1 0 6100 0001V	Electrolytic	10μF 10V	1	R139	RP3 3 4121 JH000	Pretty Carbon	330kΩ 1/8W ±5%	1
C313	CD1 0 763A 0001V	Electrolytic	100μF 6.3V	1	R140	RP1 5 2121 JH000	Pretty Carbon	1.5kΩ 1/8W ±5%	1
C314	CD2 2 7160 0001V	Electrolytic	220μF 16V	1	R141	RP5 6 1121 JH000	Pretty Carbon	560Ω 1/8W ±5%	1
C315	CD3 3 7160 0001V	Electrolytic	330μF 16V	1	R142	RP1 5 0121 JH000	Pretty Carbon	15Ω 1/8W ±5%	1
C316	CD1 0 8160 0001V	Electrolytic	1000μF 16V	1	R143	RP3 3 2121 JH000	Pretty Carbon	3.3kΩ 1/8W ±5%	1
C317	CM4 7 3500 K00SV	Mylar	0.047μF 50V ±10%	1	R144	RP5 6 2121 JH000	Pretty Carbon	5.6kΩ 1/8W ±5%	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty		
R145	RP1 2 2121 JH000	Pretty Carbon	1.2kΩ 1/8W ±5%	1	R311	RP5 6 2121 JH000	Pretty Carbon	5.6kΩ 1/8W ±5%	1
R146	RP4 7 0121 JH000	Pretty Carbon	47Ω 1/8W ±5%	1	R312	RP1 0 5121 JH000	Pretty Carbon	1MΩ 1/8W ±5%	1
R147	RP4 7 3121 JH000	Pretty Carbon	47kΩ 1/8W ±5%	1	R313	RP9 1 1121 JH000	Pretty Carbon	910Ω 1/8W ±5%	1
R148	RP1 5 3121 JH000	Pretty Carbon	15kΩ 1/8W ±5%	1	R315	RP2 2 3121 JH000	Pretty Carbon	22kΩ 1/8W ±5%	1
R149	RH4 7 0501 JH000	Metal	47Ω 1/2W ±5%	1	R316	RP1 2 3121 JH000	Pretty Carbon	12kΩ 1/8W ±5%	1
R150	RP4 7 2121 JH000	Pretty Carbon	4.7kΩ 1/8W ±5%	1	R317	RP1 0 3121 JH000	Pretty Carbon	10kΩ 1/8W ±5%	1
R201	RP1 0 2121 JH000	Pretty Carbon	1kΩ 1/8W ±5%	1	R318	RP1 5 2121 JH000	Pretty Carbon	1.5kΩ 1/8W ±5%	1
R202	RP4 7 2121 JH000	Pretty Carbon	4.7kΩ 1/8W ±5%	1	R321	RP5 6 A121 JH000	Pretty Carbon	5.6Ω 1/8W ±5%	1
R203	RP1 0 3121 JH000	Pretty Carbon	10kΩ 1/8W ±5%	1	R322	RP4 7 1121 JH000	Pretty Carbon	470Ω 1/8W ±5%	1
R204	RP1 0 0121 JH000	Pretty Carbon	10Ω 1/8W ±5%	1	R323	RP5 6 A121 JH000	Pretty Carbon	5.6Ω 1/8W ±5%	1
R205	RP8 2 3121 JH000	Pretty Carbon	82kΩ 1/8W ±5%	1	R324	RH3 3 1501 JH000	Metal	330Ω 1/2W ±5%	1
R206	RD1 5 1251 JS000	Carbon	150Ω 1/4W ±5%	1	R325	RP6 8 2121 JH000	Pretty Carbon	6.8kΩ 1/8W ±5%	1
R207	RP4 7 1121 JH000	Pretty Carbon	470Ω 1/8W ±5%	1	R327	RP2 2 2121 JH000	Pretty Carbon	2.2kΩ 1/8W ±5%	1
R208	RD2 7 2251 JS000	Carbon	2.7kΩ 1/4W ±5%	1	R328	RP3 3 3121 JH000	Pretty Carbon	33kΩ 1/8W ±5%	1
R209	RP1 8 2121 JH000	Pretty Carbon	1.8kΩ 1/8W ±5%	1	R329	RP6 8 2121 JH000	Pretty Carbon	6.8kΩ 1/8W ±5%	1
R210	RP1 5 3121 JH000	Pretty Carbon	15kΩ 1/8W ±5%	1	R330	RP6 8 2121 JH000	Pretty Carbon	6.8kΩ 1/8W ±5%	1
R211	RP2 7 3121 JH000	Pretty Carbon	27kΩ 1/8W ±5%	1	R331	RD3 3 A251 JS000	Carbon	3.3Ω 1/4W ±5%	1
R212	RP1 0 3121 JH000	Pretty Carbon	10kΩ 1/8W ±5%	1	R332	RD3 3 A251 JS000	Carbon	3.3Ω 1/4W ±5%	1
R213	RP1 0 4121 JH000	Pretty Carbon	100kΩ 1/8W ±5%	1	R333	RP1 2 3121 JH000	Pretty Carbon	12kΩ 1/8W ±5%	1
R214	RP1 5 3121 JH000	Pretty Carbon	15kΩ 1/8W ±5%	1	R334	RP1 2 3121 JH000	Pretty Carbon	12kΩ 1/8W ±5%	1
R215	RP4 7 3121 JH000	Pretty Carbon	47kΩ 1/8W ±5%	1	R335	RD5 6 0251 JS000	Carbon	56Ω 1/4W ±5%	1
R216	RP1 8 1121 JH000	Pretty Carbon	180Ω 1/8W ±5%	1	R336	RD3 9 0251 JS000	Carbon	39Ω 1/4W ±5%	1
R217	RP1 0 4121 JH000	Pretty Carbon	100kΩ 1/8W ±5%	1	R341	RP3 3 4121 JH000	Pretty Carbon	330kΩ 1/8W ±5%	1
R218	RP2 7 4121 JH000	Pretty Carbon	270kΩ 1/8W ±5%	1	R342	RP2 2 2121 JH000	Pretty Carbon	2.2kΩ 1/8W ±5%	1
R219	RP1 8 4121 JH000	Pretty Carbon	180kΩ 1/8W ±5%	1	R343	RP4 7 0121 JH000	Pretty Carbon	47Ω 1/8W ±5%	1
R220	RP3 3 2121 JH000	Pretty Carbon	3.3kΩ 1/8W ±5%	1	R344	RP1 5 4121 JH000	Pretty Carbon	150kΩ 1/8W ±5%	1
R221	RP1 0 4121 JH000	Pretty Carbon	100kΩ 1/8W ±5%	1	R345	RP1 0 2121 JH000	Pretty Carbon	1kΩ 1/8W ±5%	1
R222	RP1 0 4121 JH000	Pretty Carbon	100kΩ 1/8W ±5%	1	R346	RP2 2 3121 JH000	Pretty Carbon	22kΩ 1/8W ±5%	1
R223	RP1 2 2121 JH000	Pretty Carbon	1.2kΩ 1/8W ±5%	1	R347	RP6 8 2121 JH000	Pretty Carbon	6.8kΩ 1/8W ±5%	1
R224	RP1 0 1121 JH000	Pretty Carbon	100Ω 1/8W ±5%	1	R348	RP3 9 0121 JH000	Pretty Carbon	39Ω 1/8W ±5%	1
R225	RP1 0 3121 JH000	Pretty Carbon	10kΩ 1/8W ±5%	1	R349	RP4 7 2121 JH000	Pretty Carbon	4.7kΩ 1/8W ±5%	1
R226	RP2 2 0121 JH000	Pretty Carbon	22Ω 1/8W ±5%	1	R350	RP4 7 2121 JH000	Pretty Carbon	4.7kΩ 1/8W ±5%	1
R227	RP4 7 2121 JH000	Pretty Carbon	4.7kΩ 1/8W ±5%	1	R351	RP5 6 1121 JH000	Pretty Carbon	560Ω 1/8W ±5%	1
R228	RP4 7 2121 JH000	Pretty Carbon	4.7kΩ 1/8W ±5%	1	R357	RD2 2 0251 JS000	Carbon	22Ω 1/4W ±5%	1
R229	RP1 5 2121 JH000	Pretty Carbon	1.5kΩ 1/8W ±5%	1					
R230	RP5 6 2121 JH000	Pretty Carbon	5.6kΩ 1/8W ±5%	1					
R231	RP5 6 2121 JH000	Pretty Carbon	5.6kΩ 1/8W ±5%	1					
R232	RP3 3 1121 JH000	Pretty Carbon	330Ω 1/8W ±5%	1					
R233	RP2 2 2121 JH000	Pretty Carbon	2.2kΩ 1/8W ±5%	1					
R234	RP4 7 2121 JH000	Pretty Carbon	4.7kΩ 1/8W ±5%	1					
R235	RP3 3 2121 JH000	Pretty Carbon	3.3kΩ 1/8W ±5%	1					
R236	RP2 2 2121 JH000	Pretty Carbon	2.2kΩ 1/8W ±5%	1					
R237	RP8 2 2121 JH000	Pretty Carbon	8.2kΩ 1/8W ±5%	1					
R238	RP1 8 3121 JH000	Pretty Carbon	18kΩ 1/8W ±5%	1					
R239	RP3 3 4121 JH000	Pretty Carbon	330kΩ 1/8W ±5%	1					
R240	RP1 5 2121 JH000	Pretty Carbon	1.5kΩ 1/8W ±5%	1					
R241	RP5 6 1121 JH000	Pretty Carbon	560Ω 1/8W ±5%	1					
R242	RP1 5 0121 JH000	Pretty Carbon	15Ω 1/8W ±5%	1					
R243	RP3 3 2121 JH000	Pretty Carbon	3.3kΩ 1/8W ±5%	1					
R244	RP5 6 2121 JH000	Pretty Carbon	5.6kΩ 1/8W ±5%	1					
R245	RP1 2 2121 JH000	Pretty Carbon	1.2kΩ 1/8W ±5%	1					
R246	RP4 7 0121 JH000	Pretty Carbon	47Ω 1/8W ±5%	1					
R247	RP4 7 3121 JH000	Pretty Carbon	47kΩ 1/8W ±5%	1					
R248	RP1 5 3121 JH000	Pretty Carbon	15kΩ 1/8W ±5%	1					
R249	RH4 7 0501 JH000	Metal	47Ω 1/2W ±5%	1					
R250	RP4 7 2121 JH000	Pretty Carbon	4.7kΩ 1/8W ±5%	1					
R301	RP6 8 2121 JH000	Pretty Carbon	6.8kΩ 1/8W ±5%	1					
R302	RP1 0 2121 JH000	Pretty Carbon	1kΩ 1/8W ±5%	1					
R303	RD2 2 0251 JS000	Carbon	22Ω 1/4W ±5%	1					
R304	RP4 7 2121 JH000	Pretty Carbon	4.7kΩ 1/8W ±5%	1					
R305	RP3 9 4121 JH000	Pretty Carbon	390kΩ 1/8W ±5%	1					
R306	RD2 2 1251 JS000	Carbon	220Ω 1/4W ±5%	1					
R307	RP1 0 0121 JH000	Pretty Carbon	10Ω 1/8W ±5%	1					
R308	RP1 0 2121 JH000	Pretty Carbon	1kΩ 1/8W ±5%	1					

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
PVC1	4 2249 70451	Variable Condenser	1	R4	RP3 3 4121 JH000	Pretty Carbon 330kΩ 1/8W ±5%	1
TC1	4 2249 70290	Trimmer Condenser	1	R5	RD3 3 4251 JM000	Carbon 330kΩ 1/4W ±5%	1
TC2	4 2249 70290	Trimmer Condenser	1	R6	RP3 3 4121 JH000	Pretty Carbon 330kΩ 1/8W ±5%	1
TC3	4 2249 70290	Trimmer Condenser	1	R7	RP2 2 2121 JH000	Pretty Carbon 2.2kΩ 1/8W ±5%	1
TC4	4 2249 70290	Trimmer Condenser	1	R8	RP4 7 0121 JH000	Pretty Carbon 47Ω 1/8W ±5%	1
TC5	4 2249 70290	Trimmer Condenser	1	R9	RP4 7 0121 JH000	Pretty Carbon 47Ω 1/8W ±5%	1
CF1	4 2539 70880	Ceramic Filter	1	R10	RP1 0 2121 JH000	Pretty Carbon 1kΩ 1/8W ±5%	1
Q1	203 5 7200 60860	Transistor, 2SA 608	1	R11	RP1 0 3121 JH000	Pretty Carbon 10kΩ 1/8W ±5%	1
IC1	4 2069 71842	IC, BA4404	1	R12	RP5 6 1121 JH000	Pretty Carbon 560Ω 1/8W ±5%	1
IC2	4 2069 71730	IC, TA7640AP	1	R13	RP1 5 4121 JH000	Pretty Carbon 150kΩ 1/8W ±5%	1
IC3	4 2069 71660	IC, TA7343P	1	R14	RP3 3 2121 JH000	Pretty Carbon 3.3kΩ 1/8W ±5%	1
C1	CI2 2 3160 XG00R	Boundary 0.022μF 16V +40,-20%	1	R15	RP3 3 2121 JH000	Pretty Carbon 3.3kΩ 1/8W ±5%	1
C2	CI2 2 3160 XG00R	Boundary 0.022μF 16V +40,-20%	1	R16	RP5 6 2121 JH000	Pretty Carbon 5.6kΩ 1/8W ±5%	1
C3	CC2 0 0500 JD00C	Ceramic 20pF 50V ±5%	1	R17	RP5 6 2121 JH000	Pretty Carbon 5.6kΩ 1/8W ±5%	1
C4	CC1 8 0500 JD00C	Ceramic 18pF 50V ±5%	1	R18	RP4 7 0121 JH000	Pretty Carbon 47Ω 1/8W ±5%	1
C5	CI2 2 3160 XG00R	Boundary 0.022μF 16V +40,-20%	1	R19	RP6 8 2121 JH000	Pretty Carbon 6.8kΩ 1/8W ±5%	1
C6	CC5 0 A500 CD00C	Ceramic 5pF 50V ±0.2pF	1	R20	RP6 8 2121 JH000	Pretty Carbon 6.8kΩ 1/8W ±5%	1
C7	CC1 5 0500 JD00C	Ceramic 15pF 50V ±5%	1	R21	RP1 0 1121 JH000	Pretty Carbon 100Ω 1/8W ±5%	1
C8	CC1 0 0500 JD00C	Ceramic 10pF 50V ±5%	1	R22	RP1 0 2121 JH000	Pretty Carbon 1kΩ 1/8W ±5%	1
C9	CI2 2 3160 XG00R	Boundary 0.022μF 16V +40,-20%	1	R23	RP1 0 0121 JH000	Pretty Carbon 10Ω 1/8W ±5%	1
C10	CI2 2 3160 XG00R	Boundary 0.022μF 16V +40,-20%	1	R24	RP3 3 0121 JH000	Pretty Carbon 33Ω 1/8W ±5%	1
C11	CI2 2 3160 XG00R	Boundary 0.022μF 16V +40,-20%	1	R25	RD2 2 1251 JM000	Carbon 220Ω 1/4W ±5%	1
C12	CI2 2 3160 XG00R	Boundary 0.022μF 16V +40,-20%	1	R26	RP1 0 3121 JH000	Pretty Carbon 10kΩ 1/8W ±5%	1
C13	CC4 7 1500 KE00C	Ceramic 470pF 50V ±10%	1	R27	RP2 2 2121 JH000	Pretty Carbon 2.2kΩ 1/8W ±5%	1
C14	CI2 2 3160 XG00R	Boundary 0.022μF 16V +40,-20%	1				
C15	CI2 2 3160 XG00R	Boundary 0.022μF 16V +40,-20%	1				
C16	CD1 0 6100 0000V	Electrolytic 10μF 10V	1				
C17	CD2 2 6100 0000V	Electrolytic 22μF 10V	1				
C18	CC6 0 A500 CD00C	Ceramic 6pF 50V ±0.2pF	1				
C19	CD1 0 5100 0000V	Electrolytic 1μF 10V	1				
C20	CD1 0 5100 0000V	Electrolytic 1μF 10V	1				
C21	CD3 3 5100 0000V	Electrolytic 3.3μF 10V	1				
C22	CS1 0 2500 J010F	Polystyroul 0.001μF 50V ±5%	1				
C23	CD1 0 6100 0000V	Electrolytic 10μF 10V	1				
C24	CC1 0 2500 KE00R	Ceramic 0.001μF 50V ±10%	1				
C25	CC1 0 2500 KE00R	Ceramic 0.001μF 50V ±10%	1				
C26	CD1 0 4160 0000V	Electrolytic 0.1μF 16V	1				
C27	CD1 0 4160 0000V	Electrolytic 0.1μF 16V	1				
C28	CI1 0 3250 MF00R	Boundary 0.01μF 25V ±20%	1				
C29	CI1 0 3250 MF00R	Boundary 0.01μF 25V ±20%	1				
C30	CI2 2 3160 XG00R	Boundary 0.022μF 16V +40,-20%	1				
C31	CD4 7 7100 0000V	Electrolytic 470μF 10V	1				
C32	CC1 0 2500 KE00R	Ceramic 0.001μF 50V ±10%	1				
C33	CI2 2 3160 XG00R	Boundary 0.022μF 16V +40,-20%	1				
C34	CC1 5 0500 JD00C	Ceramic 15pF 50V ±5%	1				
C36	CC5 0 A500 CD00C	Ceramic 5pF 50V ±0.2pF	1				

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
JACK P.C.B. ASSY			
PCB4	4 1329 78440	Jack P.C.B. Assy	1
S7	4 2319 75590	Slide Switch (Beat Cancel)	1
J5	4 2359 73601	2P Jack (LINE IN)	1
J6	4 2359 73601	2P Jack (LINE OUT)	1
C601	CM3 3 2500 K00SV	Mylar 0.0033 μ F 50V $\pm$ 10%	1
C602	CM1 8 2500 K00SV	Mylar 0.0018 μ F 50V $\pm$ 10%	1
R601	RP1 0 4121 JH000	Pretty Carbon 100k Ω 1/8W $\pm$ 5%	1
R602	RP1 0 4121 JH000	Pretty Carbon 100k Ω 1/8W $\pm$ 5%	1
R603	RP2 2 2121 JH000	Pretty Carbon 2.2k Ω 1/8W $\pm$ 5%	1
R604	RP2 2 2121 JH000	Pretty Carbon 2.2k Ω 1/8W $\pm$ 5%	1

POWER SUPPLY P.C.B. ASSY			
PCB5	4 1919 71650	Power Supply P.C.B. Assy	1
	141 2 4359 21300	Socket Cover	1
	141 2 4729 05000	Staple, 5mm	2
S13	Δ 4 2319 75770	Rotary Switch (Voltage Select)	1
J7	Δ 4 2359 73680	AC/DC Power Socket	1
D701	202 5 2320 13210	Diode, DS 132A	1
D702	202 5 2320 13110	Diode, DS 131A	1
C701	CC2 2 3500 ZG00C	Ceramic 0.022 μ F 50V +80,-20%	1
C702	CC2 2 3500 ZG00C	Ceramic 0.022 μ F 50V +80,-20%	1
C703	CC2 2 3500 ZG00C	Ceramic 0.022 μ F 50V +80,-20%	1
C704	CC2 2 3500 ZG00C	Ceramic 0.022 μ F 50V +80,-20%	1
C705	CD2 2 8250 0001V	Electrolytic 2200 μ F 25V	1

LED INDICATOR P.C.B. ASSY			
PCB6	4 1329 78451	LED Indicator P.C.B. Assy	1
CN2	4 2359 75840	Connector 3P Assy	1
CN3	4 2359 75759	Connector 3P Assy	1
D501	4 2029 71700	LED, SLP-166B (VU Meter/Power/Battery)	1
D502	4 2029 72440	LED, SLP-955B (FM Stereo)	1
D503	4 2029 72430	LED, SLP-255B (Tuning)	1
IC501	4 2069 71890	IC AN6884	1
C501	CD1 0 6160 0001V	Electrolytic 10 μ F 16V	1
R501	RH5 1 1501 JH000	Metal 510 Ω 1/2W $\pm$ 5%	1
R502	RD2 2 1251 JS000	Carbon 220 Ω 1/4W $\pm$ 5%	1
R503	RP1 0 3121 JH000	Pretty Carbon 10k Ω 1/8W $\pm$ 5%	1
R504	RH2 7 1501 JH000	Metal 270 Ω 1/2W $\pm$ 5%	1

NOTES:

- Parts order must contain Model Number, Part Number and Description.
- Ordering quantity of screws and resistors must be multiple of 10 pcs.

PRODUCT SAFETY NOTICE

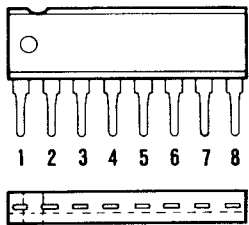
Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol Δ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with Δ , use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual.

Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

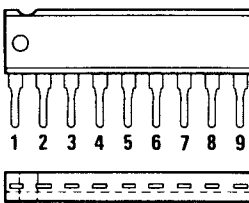
IC & TRANSISTOR LEAD IDENTIFICATION

TRANSISTOR	FRONT VIEW	BOTTOM VIEW
2SA608 2SC536 2SD400 2SD734		
2SD1012		
2SC1583		
2SA937 2SC2021		
TERMINAL NAME B → BASE C → COLLECTOR E → EMITTER		

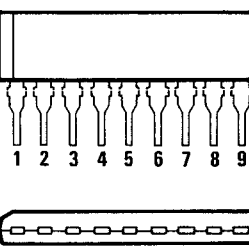
BA3302 FRONT/BOTTOM VIEWS



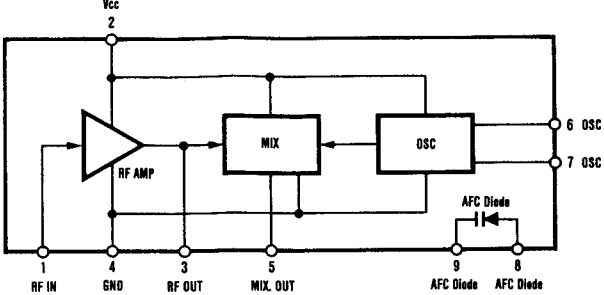
BA4404 FRONT/BOTTOM VIEWS



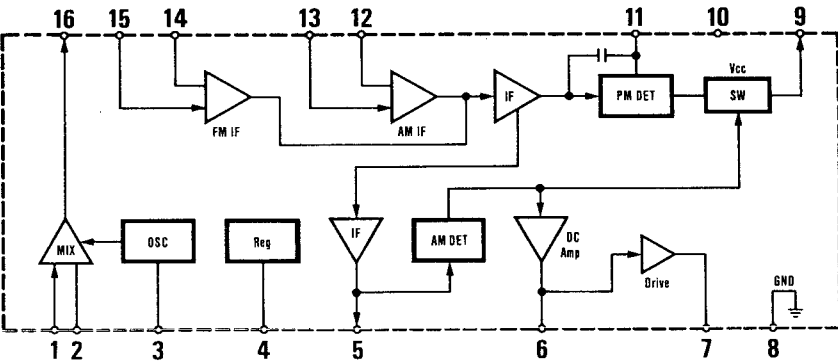
AN6884 FRONT/BOTTOM VIEWS



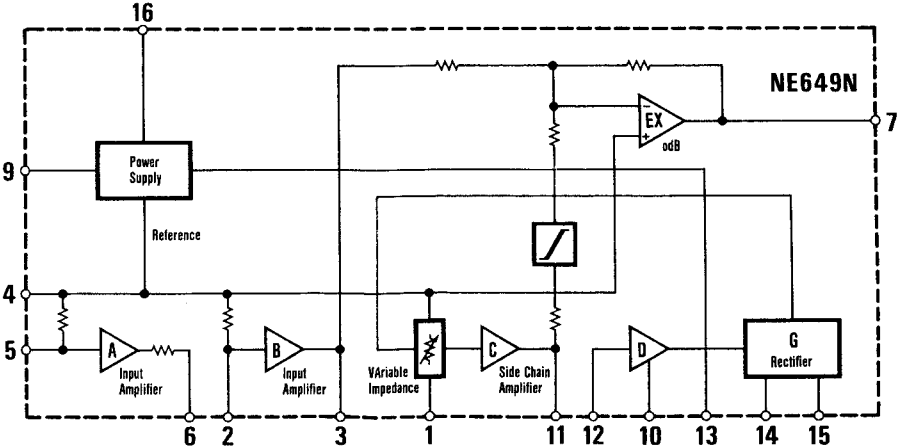
BA4404 BLOCK DIAGRAM



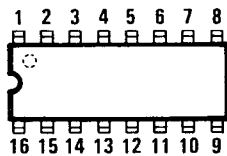
TA7640AP BLOCK DIAGRAM



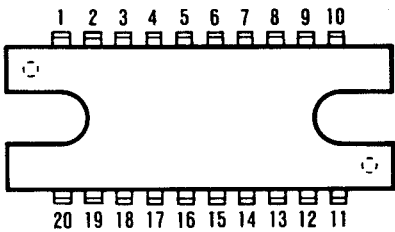
NE649N BLOCK DIAGRAM



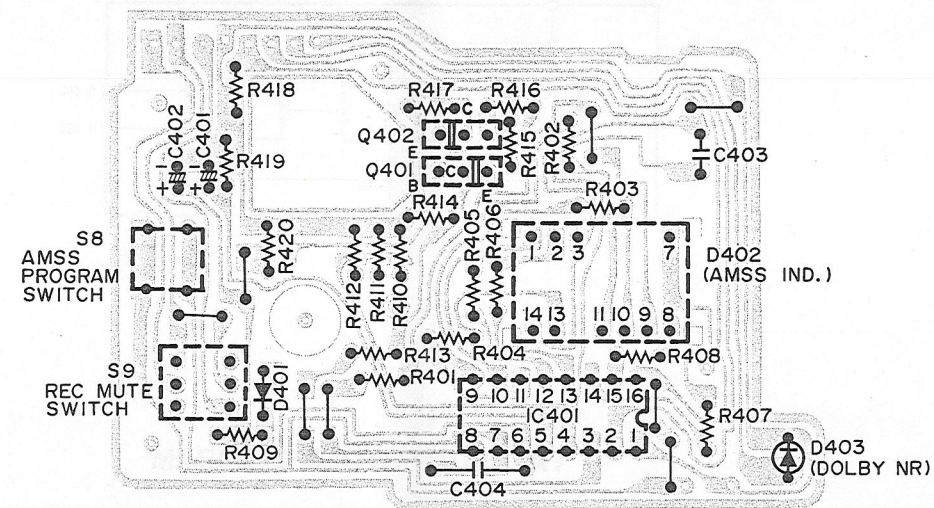
NE649N
TC938AP
TA7640AP } BOTTOM VIEWS



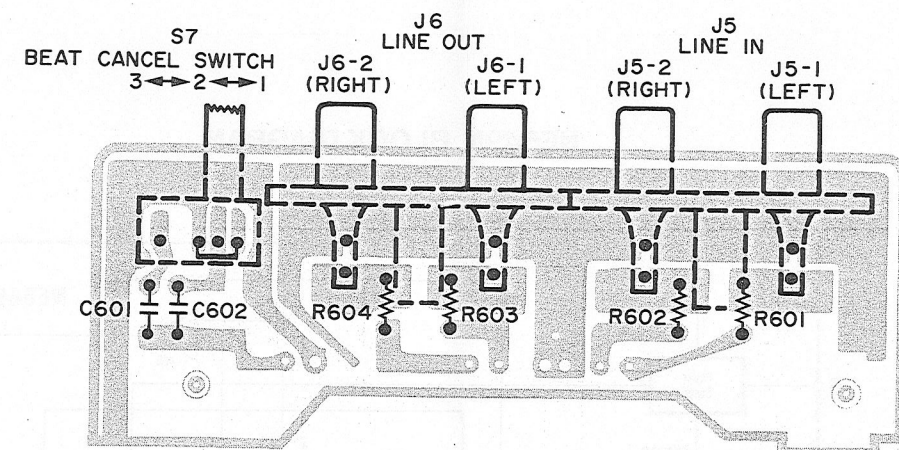
LA4505 BOTTOM VIEW



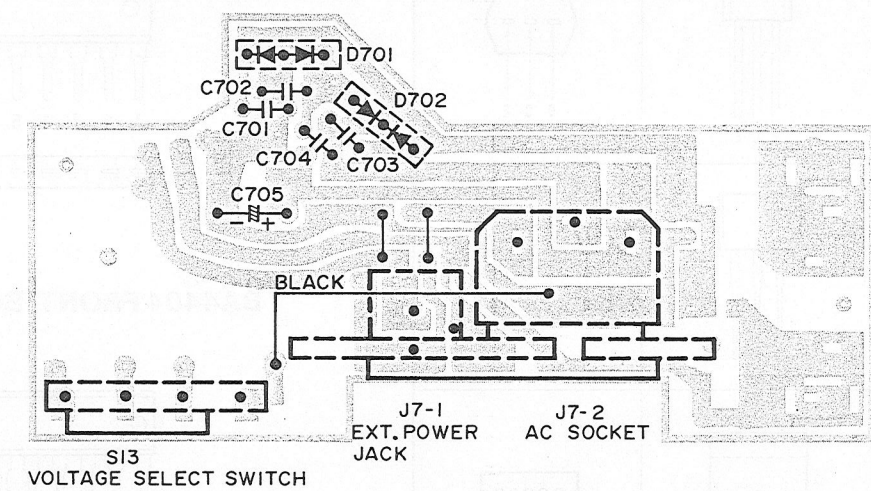
AMSS PROGRAM P.C.BOARD



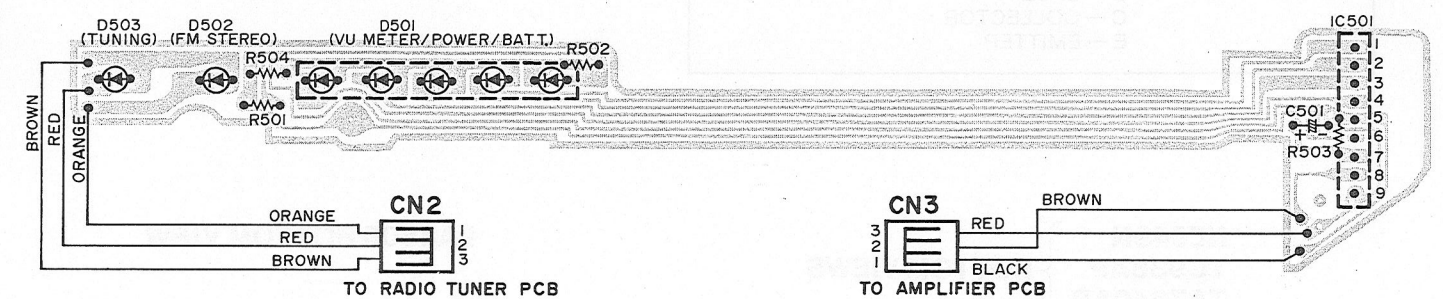
JACK P.C.BOARD



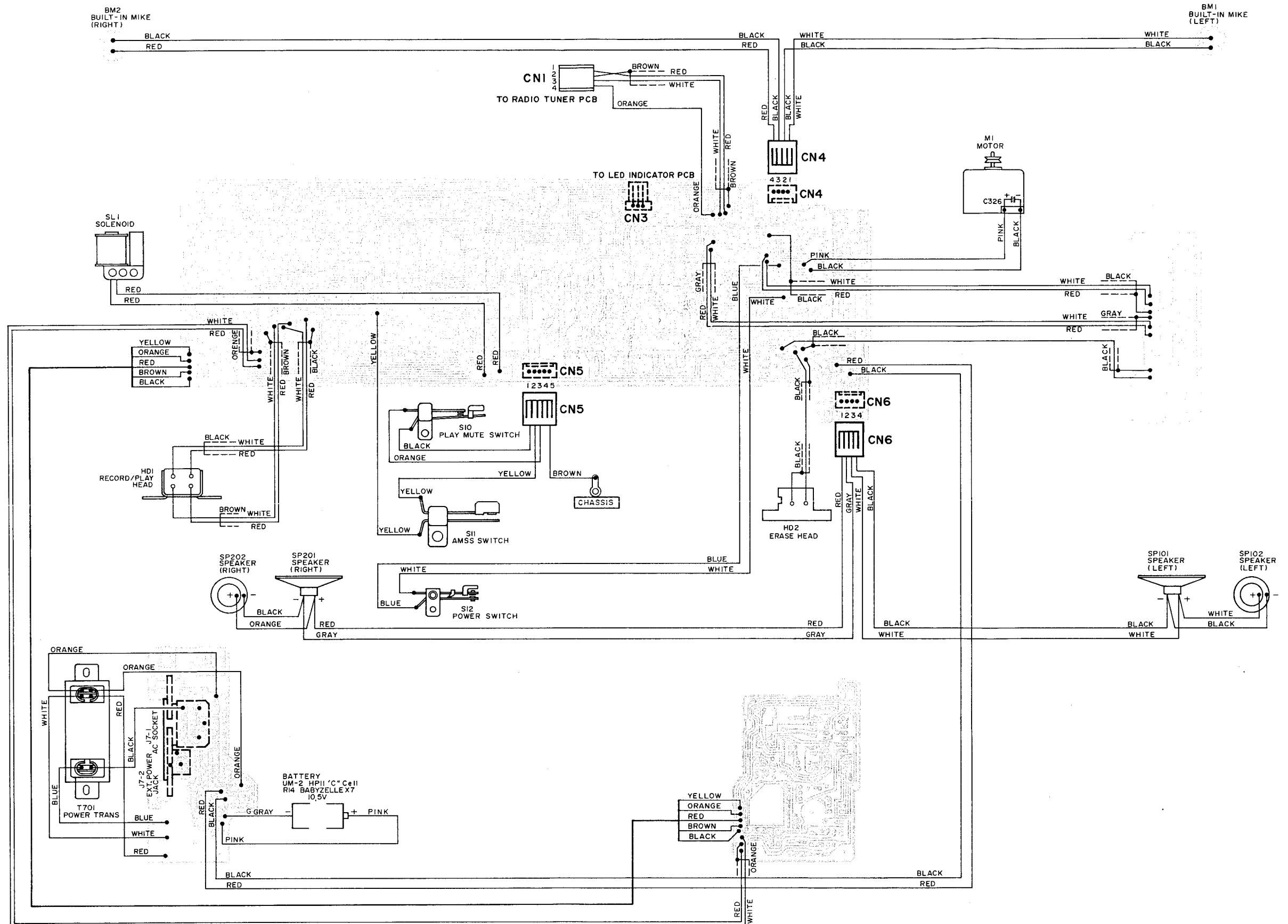
POWER SUPPLY P.C.BOARD

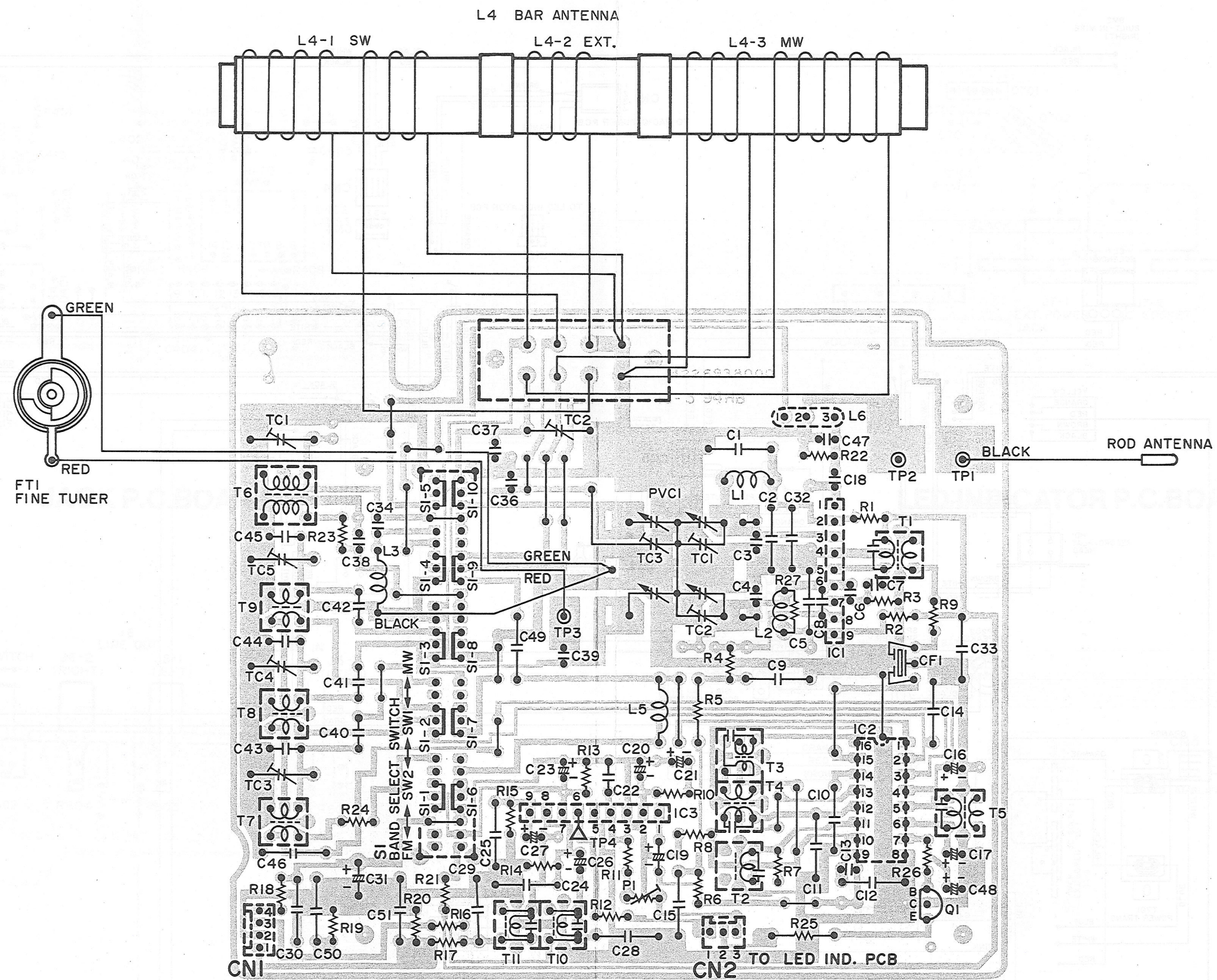


LED INDICATOR P.C.BOARD

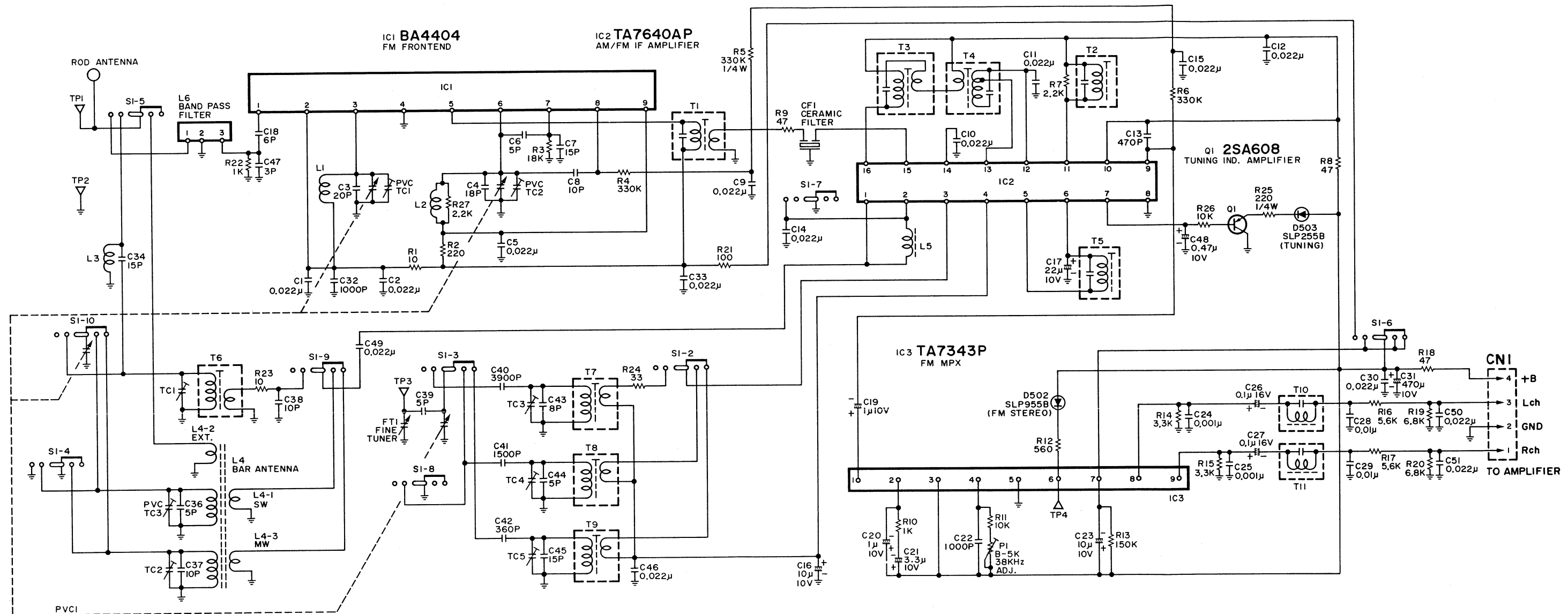


WIRING DIAGRAM

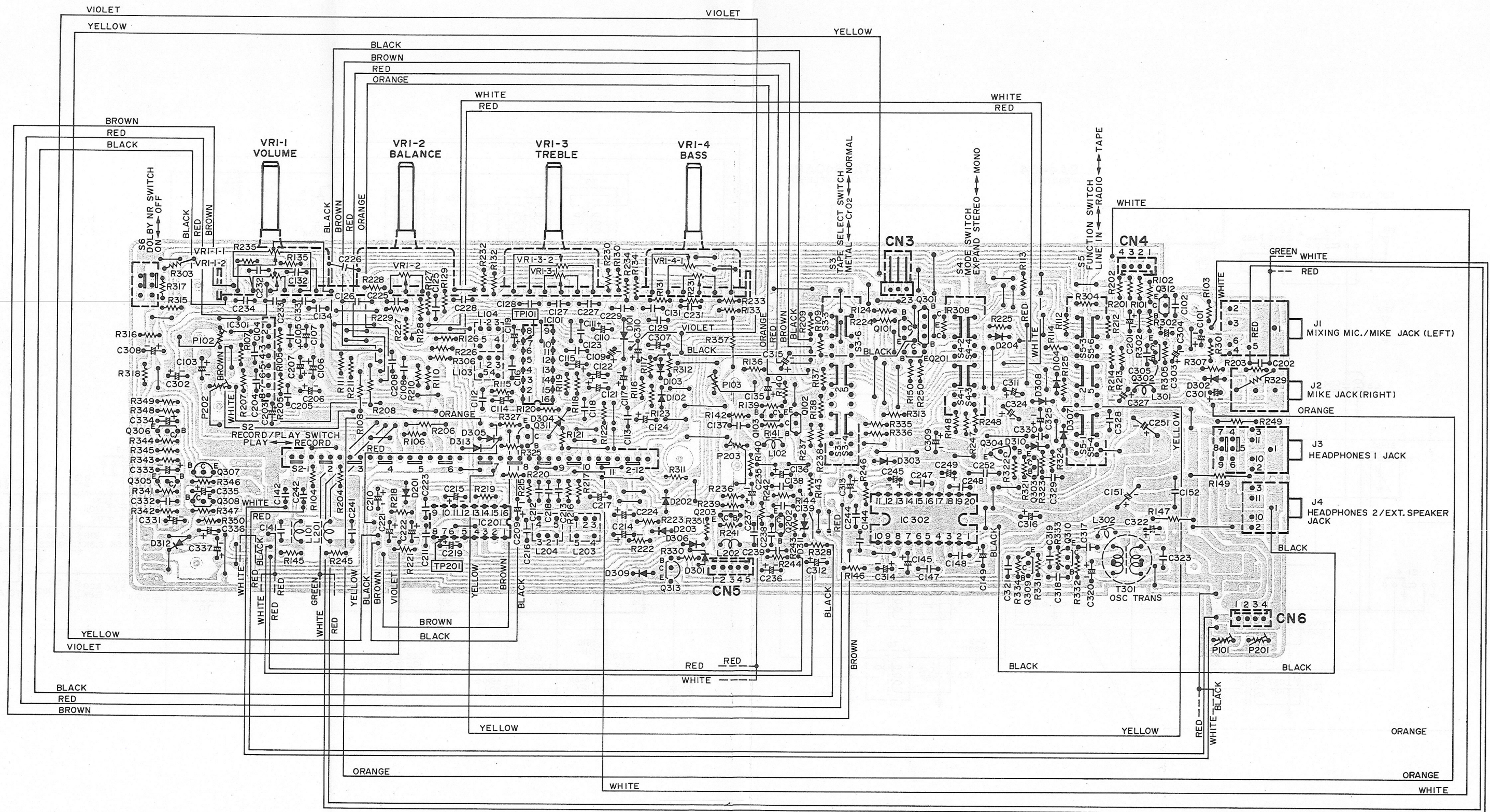




SCHEMATIC DIAGRAM (Tuner)



AMPLIFIER P.C.BOARD



PRODUCT SAFETY NOTICE

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SCHEMATIC DIAGRAM (Amplifier)

